

Traver Community

Sewer Collection and Wastewater

Treatment Evaluation

Supplement to Study Prepared in June 2005

FINAL DRAFT



June 2014

Provost & Pritchard Consulting Group



I. INTRODUCTION	1
II. PLANNING AREA	2
A. Location.....	2
B. Environmental Resources.....	2
C. Growth Areas and Population Trends.....	2
III. EXISTING COLLECTION SYSTEM AND FLOWS	4
A. Existing Sewer Trunk lines	4
B. Volume of Waste Discharge.....	4
IV. WASTEWATER TREATMENT FACILITY	5
A. Location.....	5
B. History	5
C. Wastewater Characteristics	5
D. Treatment Facilities	5
E. SCADA (Supervisory Control and Data Acquisition).....	5
V. NEED FOR THE EVALUATION	6
A. Growth	6
B. Projected Future Flows	7
VI. RECOMMENDED IMPROVEMENTS	8
A. Description	8
B. Environmental Impacts	12
C. Land Requirements	13
D. Cost Estimates.....	13
VII. OPERATIONS AND DEBT REPAYMENT	13
A. Operations.....	Error! Bookmark not defined.
B. Time Schedule	14
C. Construction Design Criteria	15
VIII. PROPOSED FUNDING SOURCES	17
IX. CONCLUSIONS AND RECOMMENDATIONS	19
X. EXHIBITS and APPENDICES	20

I. INTRODUCTION

Provost & Pritchard prepared a report in June 2005 titled "Traver Redevelopment Project Sewer Collection and Wastewater Treatment Study (Original Study). Provost & Pritchard Consulting Group was retained by the Tulare County Redevelopment Agency (TCRA) to prepare an updated Sewer Collection and Wastewater Treatment Study for the Traver Redevelopment Project Area. The purpose of this study was to:

1. Review the impacts of three (3) scenarios prepared by the County of Tulare. The three (3) scenarios of anticipated growth in Traver are described as follows:
 - Scenario 1 (refer to Exhibit 1) includes serving all entities that the County has current commitments to serve. The current commitments are shown in Exhibit 2 – Anticipated Sewer Connections.
 - Scenario 2 (refer to Exhibit 3) includes Scenario 2, serving phase 1 of a new residential development between Jacobs Drive and Avenue 368, north of the Zone of Benefit (ZOB), and assumed to include 100 additional residential sewer connections. This scenario includes development of the area between the railroad tracks and State Route 99, south of Merritt Ave.
 - Scenario 3 (refer to Exhibit 4) includes Scenario 2 and the remainder of the proposed residential development (assumed to include an additional 100 residential sewer connections), and development of the area between the railroad tracks and State Route 99.
2. Analyze existing wastewater flow, predict quantity and physical origin of future flows, and provide a preliminary sewer collection system design.
3. Analyze existing wastewater treatment plant capacity, estimate future needs, provide design alternatives, and provide a recommendation for expansion to accommodate the scenarios..
4. Provide opinions of probable construction cost for design alternatives.

II. PLANNING AREA

A. Location

The community of Traver is situated in the heart of California's Southern San Joaquin Valley, approximately 12 miles northwest of Visalia in Tulare County (Exhibit 5).

Refer to the Original Study.

B. Environmental Resources

1. Soils

Refer to the Original Study.

2. Groundwater

Groundwater in the Traver area typically travels in a northwesterly direction (Exhibit 6). Typical elevation of the groundwater is 215.

3. 100/500 Year Flood Plains

Refer to the Original Study (see Exhibit 7).

4. Land Use

Updated land use information in the Traver area is presented in Exhibit 8.

5. Water Supply

Refer to the Original Study.

6. Climate and Winds

Refer to the Original Study.

7. Cultural and Historic Resources

Refer to the Original Study.

C. Growth Areas and Population Trends

1. Population trends

Recent interest from developers and county-wide housing starts indicate that a conservative estimate of growth increase for Traver would follow the county-wide trend. The population in 2010 was 713 residents, which is a decrease of population since 2000; application of the 1.7% growth rate extends as shown in the following table:

YEAR	POPULATION
2010	7131
2015	776
2020	844
2030	999

Property zoned R-1 north of Jacobs and west of Canal is proposed for 12 lots of single-family residential development. The Original Study included an opinion of the capacity of the sewer collection system and wastewater treatment facilities to accept the twelve (12) additional single-family residential units. A copy of the Tentative Subdivision Map for the 12 lots is included as Appendix A. This subdivision is incorporated into the evaluation of Scenario 1.

Additional housing within the existing Traver Redevelopment Project boundary is limited to very few vacant lots as in-fill. However, a portion of the Study Area, currently zoned RA, is proposed for residential development. If that area is developed to at least 200 single family residential lots, the population increase could be 800 persons, which exceeds the table above.

2. Commercial growth

Commercial growth may also contribute to wastewater flows in the Traver area. Areas of commercial and industrial growth for this evaluation are identified in Exhibits 3 and 4.

III. EXISTING COLLECTION SYSTEM AND FLOWS

A. Existing Sewer Trunk lines

The existing parcels and sewer mains are shown in Exhibit 9. The existing and proposed sewer system serving Traver is depicted in Exhibit 10. The sewer system includes 6" and 8" mains. Pursuant to the County of Tulare, the collection system serves 198 legal connections: 175 single-family residents, 13 standby, 4 churches, 1 preschool, 1 elementary school, 1 laundry mat, and 2 grocery/convenience stores.

B. Volume of Waste Discharge

The average daily flow (ADF) for 2013 was approximately 51,146 gallons per day (gpd). The system is permitted for 88,000 gpd. Exhibits 11a – 11d are estimates of the flowrates within each portion of the sewer system. It is noted that several portions of the existing sewer system do not achieve typical desired velocity, however, the overall capacity of the sewer system is sufficient for present demands. Based on the total number of legal connections, the average flowrate per connection is approximately 301 gpd. Based on the population of 713, the average contribution per person is 72 gpd. For the purposes of this study, commercial property was assumed to contribute 1,000 gpd and industrial property was assumed to contribute 3,000 gpd. Exhibit 12 includes a review of the collection system with peak sewer flows. A peaking factor 3.0 is used.

The analysis suggests that the collection system is sufficient for daily peak flows. Unlike the circumstances of 2005, there are no significant variations of monthly flowrates received at the treatment plant. Average monthly flowrates between January 2013 and December 2013 ranged from 48,549 gpd to 61,204 gpd. A graph of flowrates received at the treatment plant is included as Exhibit 13.

IV. WASTEWATER TREATMENT FACILITY

A. Location

The location of the wastewater treatment plant (WWTP) is shown in Exhibit 10 and is situated on the east side of Road 44, approximately ¼ mile south of Avenue 368 (APN 045-010-26). The plant is located at approximate Latitude 119° 28' 30", Longitude 36° 27' 15".

B. History

The plant was constructed in 1992 and funded by the United States Environmental Protection Agency, the State Water Resources Control Board, and the United States Department of Agriculture. The facilities are regulated by Waste Discharge Requirements No. 88-098 and are permitted for 88,000 gallons per day (see Appendix G in the Original Study).

C. Wastewater Characteristics

Influent characteristics are assumed to be typical domestic wastewater with influent biochemical oxygen demand (BOD) and total suspended solids (TSS) of approximately 250 mg/l. Sampling of the influent is not a current requirement by the State. The assumed concentrations are conservative estimates for raw influent based on accepted textbook values and influent of similar communities in the Central Valley. Present effluent requirements are 1.0 mg/l D.O. within any holding pond and an effluent electroconductivity of 500 micromhos/cm greater than source water. Future effluent requirements are assumed to be 40 mg/l for BOD and TSS and 10 mg/l of Nitrate as Nitrogen. The disposal ponds will be required to be sufficient for a 100 year return period precipitation year.

The reported range of electroconductivity values ranged from 886 to 1,235 micromhos/cm. The regulatory requirements are 500 micromhos/cm above source water, or 1,000 micromhos/cm, whichever is less. The electroconductivity values are shown in Exhibit 14. The wide variation of electroconductivity values should be investigated and the cause should be determined. It is possible that the variation is due to chlorination of the source water.

D. Treatment Facilities

A description of the existing treatment facilities is included in the Original Study.

E. SCADA (Supervisory Control and Data Acquisition)

Refer to the Original Study.

V. NEED FOR THE EVALUATION

A. Growth

This report evaluates sewer infrastructure requirements for three scenarios:

- Scenario 1 (refer to Exhibit 1) includes serving all entities that the County has current commitments to serve. The current commitments are shown in Exhibit 2 – Anticipated Sewer Connections.
- Scenario 2 (refer to Exhibit 3) includes Scenario 2, serving phase 1 of a new residential development between Jacobs Drive and Avenue 368, north of the Zone of Benefit (ZOB), and assumed to include 100 additional residential sewer connections. This scenario includes development of the area between the railroad tracks and State Route 99, south of Merritt Ave.
- Scenario 3 (refer to Exhibit 4) includes Scenario 2 and the remainder of the proposed residential development (assumed to include an additional 100 residential sewer connections), and development of the area between the railroad tracks and State Route 99.

In the Traver community there is a need to provide the treatment and disposal capacity to provide for capability to accept new businesses that will provide jobs for residents of the community. Traver is a State Route 99 corridor community that would be able to support general retail, industrial, distribution, and travel oriented businesses.

In addition, the County of Tulare requires updated information associated with the anticipated capital costs associated with anticipated sanitary sewer infrastructure necessary to serve the proposed growth. The information may be utilized to determine necessary connection fees that would be required of new development. Further, the information may be utilized in applications for funding assistance to assist with the construction of the improvements.

From a regulatory perspective, the County of Tulare is responsible to prepare an expansion plan for facilities that are anticipated to exceed the permitted capacity of the facilities. The expansion plan would be a component of a Report of Waste Discharge that would be submitted to the Regional Water Quality Control Board for review and approval. The RWQCB would determine updated Waste Discharge Requirements for the facilities.

B. Projected Future Flows

Sanitary sewer demands for Commercial property is estimated to be 1,000 gpd/gross acre. Sanitary sewer demands for Industrial property is estimated to be 3,000 gpd/gross acre.

As can be seen from the table, projected flows are anticipated to increase as follows:

Existing and Projected Flow			
Scenario	Residential	Commercial and Industrial	Cummulative Total
	(gpd)	(gpd)	(gpd)
Present			55,624
Scenario 1	8,127		63,751
Scenario 2	30,100	49,457	143,308
Scenario 3	30,100	14,649	188,057

VI. RECOMMENDED IMPROVEMENTS

A. Description

1. Sewer Collection System

The existing sewer mains and probable alignment of future sewer mains for the community of Traver are shown in Exhibit 10. The collection system phasing is anticipated to be separated into three areas of work.

Initial Construction Requirements (Scenario 1)

The first segment of work is to construct a sewer main in Jacobs and connect to the sewer main in Canal Street. This construction would be necessary to serve the Tentative Subdivision discussed earlier. It is recommended that the developer of the subdivision be the responsible party to design and construct the sewer main. The County would be responsible for review of the design and review of the construction.

It is noted that Scenario 1 includes service to an anticipated Medical building east of the school. It is recommended that the owner of the proposed Medical building be responsible to identify and obtain an easement from the proposed building to Merritt Drive so that individual sewer service may be constructed by said developer to the sanitary sewer in Merritt Drive. The responsibility of the County would be that of review of the easement, design, and construction.

Second Construction Requirements (Scenario 2)

The second area of work is to construct a lift station in the vicinity of Merritt Drive and Burke Street. The lift station would receive wastewater from the proposed residential subdivision north of Jacobs between Burke and Canal Street. The lift station would also be sized to receive gravity flow from the commercial areas between Burke Drive and State Route 99. Refer to Exhibit 15 for a conceptual layout of the proposed lift station. It is noted that the County of Tulare would be required to acquire the property for the construction of the lift station. Since the lift station will be located within the 100 year flood zone, all pads of the lift station site shall have an elevation of approximately 12 inches above the centerline of Merritt Drive to minimize the potential of flood damage. The lift station will require more area than is available within existing rights of way. Exhibits 20 and 21 identify typical plan view and sections of the lift station, however, it is anticipated the lift station would be a duplex station. Exhibits 20 and 21 also serve to describe the potential new lift station at the wastewater treatment plant, which

would be a triplex lift station. A new force main would be required within the Merritt Drive right of way, which would extend to Road 44 (refer to Exhibit 16). As shown in Exhibit 16, the force main alignment must take into consideration the existing gas, water, and sewer mains within the Merritt Drive right of way. The force main would discharge to a gravity sewer that would extend from Avenue 368 to the wastewater treatment facility. Exhibit 17 shows a conceptual layout of the new force main and gravity main at the intersection of Merritt Drive with Avenue 368. Utilization of a lift station and force main allows portions of the sewer system to be less deep and less costly for construction.

It is noted that the property identified as APN 040-020-075, which is included in the service area for Scenario 2, does not have direct access to the County right of way. As shown in Exhibit 18, the property only has a frontage to Caltrans right of way. Appendix B includes a Caltrans right of way map that provides additional information regarding the property. A public sewer is not typically allowed within Caltrans right of way. Therefore, the owner of APN 040-020-075 would be required to obtain an easement across APN 040-020-074 in order to obtain access to the sewer system.

The second phase of work would include construction of a sewer line in Merritt Drive from Burke to 6th, and then south within 6th Street to the limit of the County right of way. Similarly, the second phase of work would include construction of a gravity main within Burke from Merritt Drive north to the connection point of the proposed subdivision. The gravity lines would discharge to the lift station at Burke and Merritt.

Third Construction Requirements (Scenario 3)

The third phase of work would extend the gravity sewer line northerly along 6th Street to serve additional commercial properties. A new sewer line would also be extended south within Burke from Merritt Drive to south of Kitchner in order to serve commercial property.

2. Treatment Plant Expansion Phases

Scenario 1 Requirements

There are no treatment or disposal construction requirements in order to serve the properties identified in Scenario 1.

Scenario 2 Requirements

As noted in the discussion regarding the collection system, a lift station, force main in Merritt, and a new gravity main in Road 44 are required to serve the demands presented in Scenario 2. In addition, the new gravity main in Road 44. A conceptual layout of the wastewater treatment and disposal facility improvements necessary for Scenario 2 is shown in Exhibit 19. The work would require a new influent lift station, headworks, aeration basin, clarifiers, blower building, sludge handling facilities, and disposal pond improvements. The proposed facilities would be located south of the existing treatment ponds so that construction could be performed with minimal disturbance of the existing treatment facility operations. It is anticipated that the existing treatment facility and the initial phase of the proposed treatment facilities would operate concurrently for a period of time. Ultimately, the existing treatment basins would be drained, the accumulated sludge removed, and the treatment basins would be converted to disposal ponds.

The existing wastewater treatment facilities lift station does not have the potential to be modified to accommodate the future flowrates anticipated. A new lift station is proposed south of the existing facilities. Exhibits 20 and 21 identify typical plan view and sections of the lift station. A magnetic flowmeter would be installed in the discharge pipeline from the lift station. The new lift station would be constructed to a depth that would allow the existing 8 inch diameter sewer main to be extended south and discharge to the new lift station.

A new headworks would be required for the treatment facilities. Exhibits 22 and 23 identify typical plan view and sections of the recommended headworks. The headworks structure would be constructed to accommodate the flows anticipated through Scenario 3. The headworks would include a self cleaning screen to remove non-biodegradable materials prior to the aeration basin.

It is noted that there is a water supply well at the wastewater treatment site. The distribution pipeline from the water supply well would be extended to the new treatment facilities for the purposes of wash down and to provide the water necessary to operate the self cleaning screen at the headworks.

The existing treatment facilities will not meet anticipated regulatory requirements, especially with respect to total Nitrogen of the effluent. The study prepared in June 2005 recommended a Biolac system of treatment. A similar treatment process (Bioworks) is now in the marketplace, which will allow for competitive pricing of the facilities for construction. These patented, proprietary processes

use a pond similar to the existing aerated ponds, but install a series of diffusers suspended from floating tubes along the surface of the pond. The air is supplied by blowers constructed in a blower building near the pond. Because the air transfer capacity of this system is greater than that of surface aerators, this process can accommodate greater flows with lesser hydraulic detention times than aerated or facultative lagoons. The anticipated expansion increment for Scenario 2 would be an aeration basin that would accommodate approximately 120,000 gallons per day. Exhibit 24 shows the relative location of the Headworks and Aeration Basins. The second aeration basin and associated improvements would be constructed to accommodate Scenario 3.

The treatment system would include clarifiers for the removal of solids and discharge of effluent to the disposal ponds.

Sludge Disposal

It is understood that sludge has not been wasted from the treatment plant since its inception. Expansion of the facility will increase the mass of solids to be wasted from the facility. Alternatives that may be applied to sludge handling include sludge drying beds, mechanical thickening/dewatering devices, and bag thickeners. Due to the availability of land and the infrequent wasting of sludge; it is recommended that sludge drying beds be considered. Conceptual layouts of sludge drying beds are included as Exhibits 25, 26, and 27. In addition, compact dewatering presses may be considered, such as the press fabricated by FKC (refer to Appendix C).

Scenario 3 Requirements

Scenario 3 improvements at the wastewater treatment facilities would include construction of the second aeration basin and associated clarifiers and sludge disposal facilities. The location of said facilities is shown on Exhibits 24 and 25.

It is anticipated that the majority of the existing treatment facilities would be demolished prior to construction of the facilities required for Scenario 3. However, the existing water supply well and the generator building may serve a continuing purpose and would be retained.

Effluent Disposal

The existing facilities have disposed of treated effluent through percolation and evaporation from the disposal ponds. It is noted that a small portion of the existing disposal ponds are necessary to

remove the effluent. A conservative estimate of the potential disposal capacity of the entire site, using a percolation capacity of 0.75 inches per day (one half of estimate) was determined in the Original Study as 171,600 gallons per day. It is likely that the actual sustainable disposal capacity of the site may be greater than this value. This disposal capacity compares favorably to the anticipated demands of the proposed residential development. Specific pond percolation testing is recommended to determine actual capacity. The current circumstances at the treatment facilities do not allow for sufficient effluent to be discharged to the disposal ponds to allow for such a test.

If actual percolation rates at the site and sanitary sewer demands of the anticipated development lead to the determination that additional property is required for ultimate buildout, the County would be required to either acquire additional property or enter into long term agreements for reclamation of effluent on nearby agricultural property.

As noted in the Original Study, the RWQCB encourages reclamation to agricultural lands wherever possible, in conformance with the Tulare Lake Basin Plan. Although this issue will need to be considered further during design and permitting of the plant expansion, identification of suitable cropland near the plant site (such as alfalfa), and preliminary contacts with the grower about the use of treated effluent on those crops, is recommended. Alfalfa is presently grown in properties south of Avenue 360 along Road 44.

If reclamation is required in the future, it is recommended that an agreement be negotiated with a nearby property owner of suitable crops, for disposal of conventional secondary effluent to the property. The County would not be required to obtain ownership of the disposal site for this purpose. The nature of treated effluent produced by the recommended facility will be as defined in Title 22 as undisinfected secondary effluent. Although this product has a more limited applicability than a disinfected tertiary effluent, it appears that numerous opportunities exist with nearby growers to apply the secondary effluent to cropland, without the added cost of tertiary facilities, and associated operations and monitoring. Selection of crops that do not fall within the human food chain, such as alfalfa or cotton (fiber and fodder) will provide the greatest flexibility when permitting for irrigation disposal.

B. Environmental Impacts

Construction of new sewers and treatment facilities will cause construction related impacts- noise, dust, and similar. New sewer and

treatment facility construction may be considered growth inducing, and that impact must be recognized.

Although no surveys of the project site have been performed by biologists, archeologists, or other trained professionals, it appears from a cursory inspection that no wetlands, endangered habitats, or cultural/historical sites would be disturbed by the proposed project.

C. Land Requirements

The total project would be built within existing rights of way, easements, and property now owned by the County, with the exception of one portion of the future sewer required to serve property west of State Route 99. The collection system lift station would require acquisition of property near Merritt and Burke.

D. Cost Estimates

Exhibit 28 includes a summary of budget capital costs for the project described, by phase. Note the following about the costs summary:

- Costs are estimated using present conditions; since it is not known when any portion of the project would be built, the costs must be adjusted to current conditions at that time.
- Property acquisition costs are not included, nor any costs for use of nearby agricultural property for effluent disposal.
- Although no extraordinary mitigation measures are expected for this project, CEQA review may reveal unknown requirements.
- Included in the estimate are contingencies at a total of 20% of cost. This item is intended to address unforeseen issues and topics that arise during design, permitting, and construction.

VII. OPERATIONS AND DEBT REPAYMENT

1. Debt Repayments

It is probable that any construction of recommended improvements will require the County to obtain funding from outside sources in the form of grants, loans, or some combination. Due to the low-income level of the community and the demonstrated need for economic development, it is likely that some level of grant funding will be obtained.

The United States Department of Agriculture, Rural Utilities Service, makes loan and grant packages available to qualifying communities. The loans and grants are provided to communities that would not otherwise be able to afford necessary improvements. The program serves “to reduce water and waste disposal costs to a

reasonable level for rural users” (USDA, RUS Program Information). The grants are available for up to 75% of project costs, however, recent funding limits and budget shortfalls have limited the loan/grant ratio to the inverse, that is, 75% loan and 25% grant. The level of grant participation is variable and is influenced by many factors including MHI, relative sewer charges, and other debt encumbrances.

2. Reserve

A capital reserve set-aside should be included in the annual costs of the facility when user charges are calculated. The set-aside will be needed in the future for many purposes, such as the following:

- Major repairs, not covered under warranty.
- Future changes in requirements, for example, regulatory.
- Eventual equipment replacement, at the end of service life.

It is recommended that the capital set-aside be established at one-tenth (1/10) of annual debt repayment requirement for the Scenario 2 construction, and increased to a similar percentage of Scenario 3 debt repayment when that portion of the improvements are funded and constructed.

3. Operator Requirements

The present facility is operated under a contract by an outside firm. Specific certification requirements for the proposed improvements are anticipated to require a Grade II Operator.

Primary changes would be the increased mechanical complexity (lift stations, self cleaning screen, blowers, automated valving) and sludge handling and disposal.

4. Monitoring and Laboratory Needs

Updated Waste Discharge Requirements will dictate monitoring and testing requirements.

B. Time Schedule

Actual construction of the improvements described herein will be determined by several factors outside the scope of this study:

- Ability to acquire the property necessary for the sanitary sewer lift station at Merritt and Burke.
- Ability to obtain funding assistance.
- Ability to determine appropriate connection fees and monthly sewer charges, and subsequently conduct a successful Prop 218 election, as required.

-
- Completion of appropriate environmental studies.
 - Preparation of a Report of Waste Discharge and receipt of appropriate Waste Discharge Requirements.
 - Final design of capital improvements.

C. Construction Design Criteria

Design criteria for this project are based upon compliance with all Federal, State, and local regulations and in accordance with customary professional standards. The following design criteria and assumptions for this project have been made:

1. Environmental review and documentation will be made according to the California Environmental Quality Act. Depending on the funding source, the National Environmental Policy Act and funding agency requirements will also apply. The review will include determination of the impacts on the environment through a preliminary review including a review of categorical exemptions, and/or an initial study. Depending upon the results of the initial study, a negative declaration, a mitigated negative declaration or an Environmental Impact Report will be prepared for approval by the County of Tulare. The project design will incorporate appropriate mitigation measures as needed. In any event, the project will be designed to minimize any harm to the environment and maximize health and sanitation benefits to the community.
2. The project will comply with the Americans with Disabilities Act (ADA) and all other requirements for making the facilities accessible to handicapped persons.
3. The project will incorporate energy-efficient devices such as premium efficiency motors and solar power where practical.
4. Design will incorporate sustainable, green building standards where cost-efficient and practical.
5. Treatment facilities and collection system components will be designed with sufficient capacity to accommodate reasonable population growth rates and anticipated commercial/industrial development.
6. The project will be designed to comply with all applicable and adopted Building Codes, environmental regulations, RWQCB requirements, seismic, and health and safety regulations.
7. All construction materials shall meet current standards including, but not limited to, American National Standards Institute (ANSI), American Water Works Association (AWWA), Hydraulics Institute

(HI), American Society for Testing Materials (ASTM), National Electrical Manufacturer's Association (NEMA), International Standard Organization (ISO), American Society of Mechanical Engineers (ASME), and the National Sanitation Foundation (NSF).

VIII. SEWER CONNECTION FEES

A summary of sewer rates and connection fees in the general proximity of Traver is included in the table below:

System	Population (2000 or 2010 Census)	Sewer Rate	Sewer Connection Fee
CSA #1	2253		
Delft Colony		\$49.00	
El Rancho		\$66.75	
Seville		\$59.75	
Tooleville		\$53.75	
Tonyville		\$60.00	
Traver	713	\$36.50	\$500
Yetter		\$79.25	
Wells Tract		\$62.25	
Caruthers CSD	2103	\$35.00	\$5,700
Cutler PUD	6300	\$33.00	\$2,075
Earlimart PUD	5531	\$14.25	\$5,258
East Orosi CSD	426	\$40.00	\$7,200
Goshen CSD	2794	\$32.00	\$975
Ivanhoe PUD	4474	\$39.85	\$1,890
Lemon Cove SD	150	\$4.50	\$500
Lindsay	11500	\$30.00	\$7,166
London CSD	1638	\$25.00	\$1,990
Malaga CWD	900	\$41.32	\$1,744
Orosi PUD	7318	\$22.97	\$1,745
Pixley PUD	3500	\$36.55	\$6,685
Poplar CSD	2200	\$25.00	\$1,300
Richgrove CSD	2700	\$18.00	\$750
Riverdale PUD	2900	\$39.00	\$3,950
Seville	400	\$59.75	
Springville PUD	1300	\$35.06	\$3,900
Strathmore PUD	2352	\$14.70	\$500
Sultana CSD	650	\$34.60	
Tipton CSD	1792	\$21.50	\$4,400
Woodville PUD	1542	\$19.25	\$4,150

In addition, summary information obtained from the SWRCB is included in Appendix D. The information indicates the general trends of sewer rates and connection fees within California since 1990. The information includes lowest, highest, and average charges, and is characterized by population, level of treatment, and County. The present sewer rates for Traver are near average for Tulare County, however, are low when compared to average rates for communities in California with a population of less than 1,000 persons. The connection fees for Traver are significantly low in comparison to other comparable communities.

Subjects to be considered for adjustment of connection fees would include the benefits of improvements to the existing population, the benefits of the improvements to new or future developments, and funding assistance obtained for the improvements.

Adjustments to the existing Zone of Benefit boundary would incorporate a method to quantify the pre-existing sanitary sewer collection, treatment, and disposal capacity that properties beyond the existing ZOB would benefit from. The properties within the ZOB have contributed toward the construction and maintenance of said existing infrastructure.

IX. CONCLUSIONS AND RECOMMENDATIONS

Construction of the Scenario 2 improvements will allow the community of Traver to alleviate the pending deficiency of collection and treatment capacity, allowing residential development to continue, and allowing some capacity for future industrial/commercial growth. The availability and timing of Scenario 3 improvements will be determined by the interest shown by larger industrial/commercial users.

Permitting of the expansion should occur only after a Capital Facilities Plan is adopted and the first phase of residential development has been submitted to the County for consideration. It is understood that the County has submitted preliminary applications for funding assistance toward construction of Scenario 1 infrastructure improvements. It is recommended that a public awareness campaign be initiated immediately so that the electorate can make informed decisions.

The expansion of the Traver Sewer Collection and Wastewater Treatment facilities is recommended to proceed with the following parameters:

- Ultimate capacity of 200,000 gpd.
- New lift station near Merritt Drive and Burke Drive. New force main in Merritt Drive.
- New treatment plant lift station and headworks.
- New Biolac or BioWorks treatment facilities.
- Disposal of effluent within existing site to 170,000 gpd or the site capacity, if proven to be greater.
- Potential for reclamation beyond existing facilities when capacity exceeds site disposal capacity.

X. EXHIBITS and APPENDICES

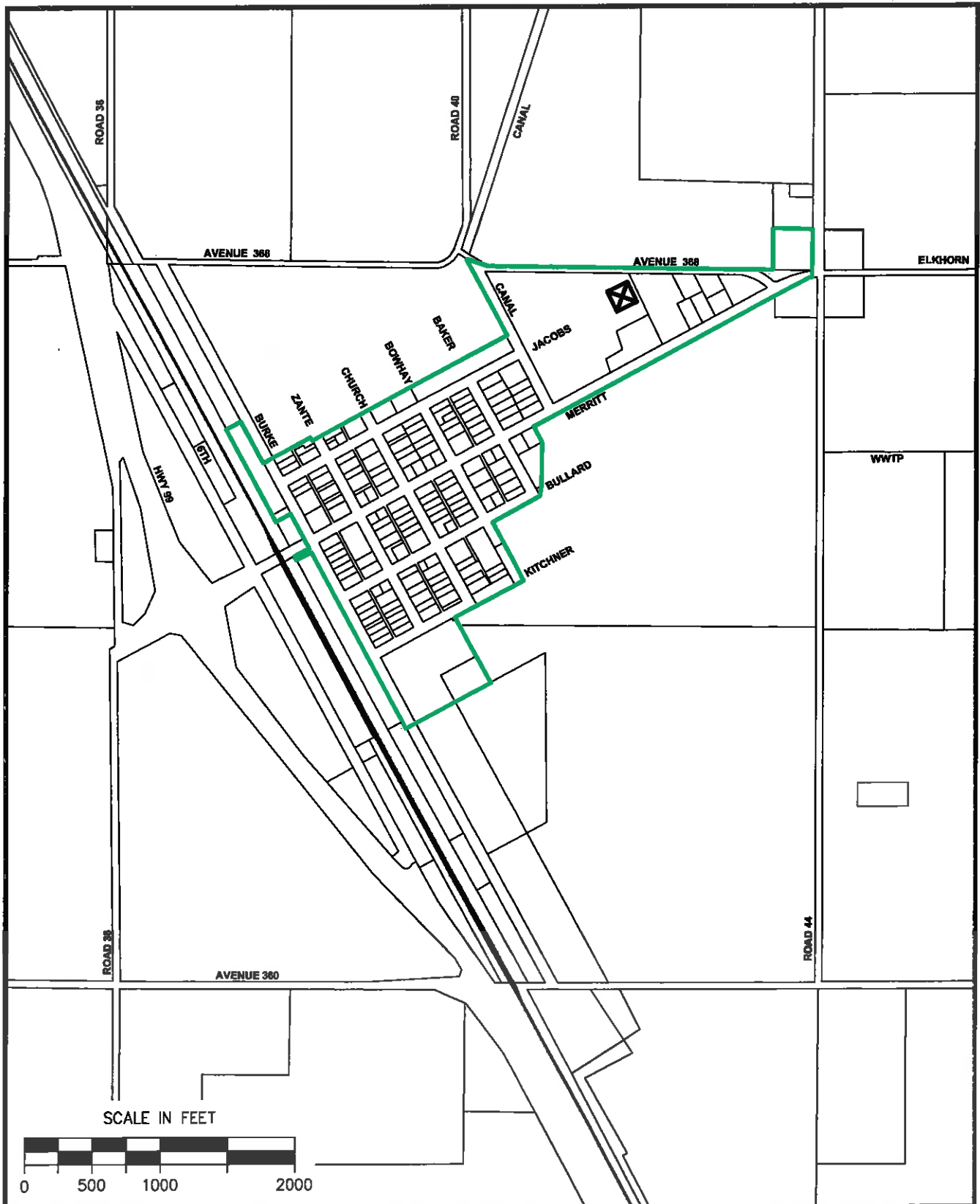
EXHIBITS

1. Scenario No. 1
2. Anticipated Sewer Connections
3. Scenario No. 2
4. Scenario No. 3
5. Traver Location Map
6. Study Area Groundwater Contours
7. Study Area Floodplains
8. Study Area Land Use
9. Existing Parcels with Existing Sewer System
10. Existing and Future Sewer System Map
11. Sewer System Flowrates
 - 11a – Existing Sewer System Flowrates
 - 11b – Scenario 1 Flowrates
 - 11c – Scenario 2 Flowrates
 - 11d – Scenario 3 Flowrates
12. Existing Sewer System Peak Flowrates
13. Treatment Facility Average Monthly Flowrates
14. Treatment Facility Electroconductivity
15. Proposed Lift Station at Merritt and Burke
16. Force Main in Merritt Drive
17. Force Main and Gravity Sewer at Merritt Drive and Road 44
18. Frontage of APN 040-020-075
19. Conceptual WWTP Layout
20. Typical Lift Station
21. Typical Lift Station Details
22. Headworks Plan View
23. Headworks Sections
24. Biolac System Layout
25. Sludge Bed Site Plan
26. Sludge Drying Bed Sections
27. Sludge Decant Structure
28. Preliminary Estimate of Overall Cost.

APPENDICES

- A Proposed Residential Layout North of Jacobs (Tentative Subdivision Map)
- B Caltrans Right of Way Map
- C FKC Screw Press information
- D SWRCB Sewer Charge Summary

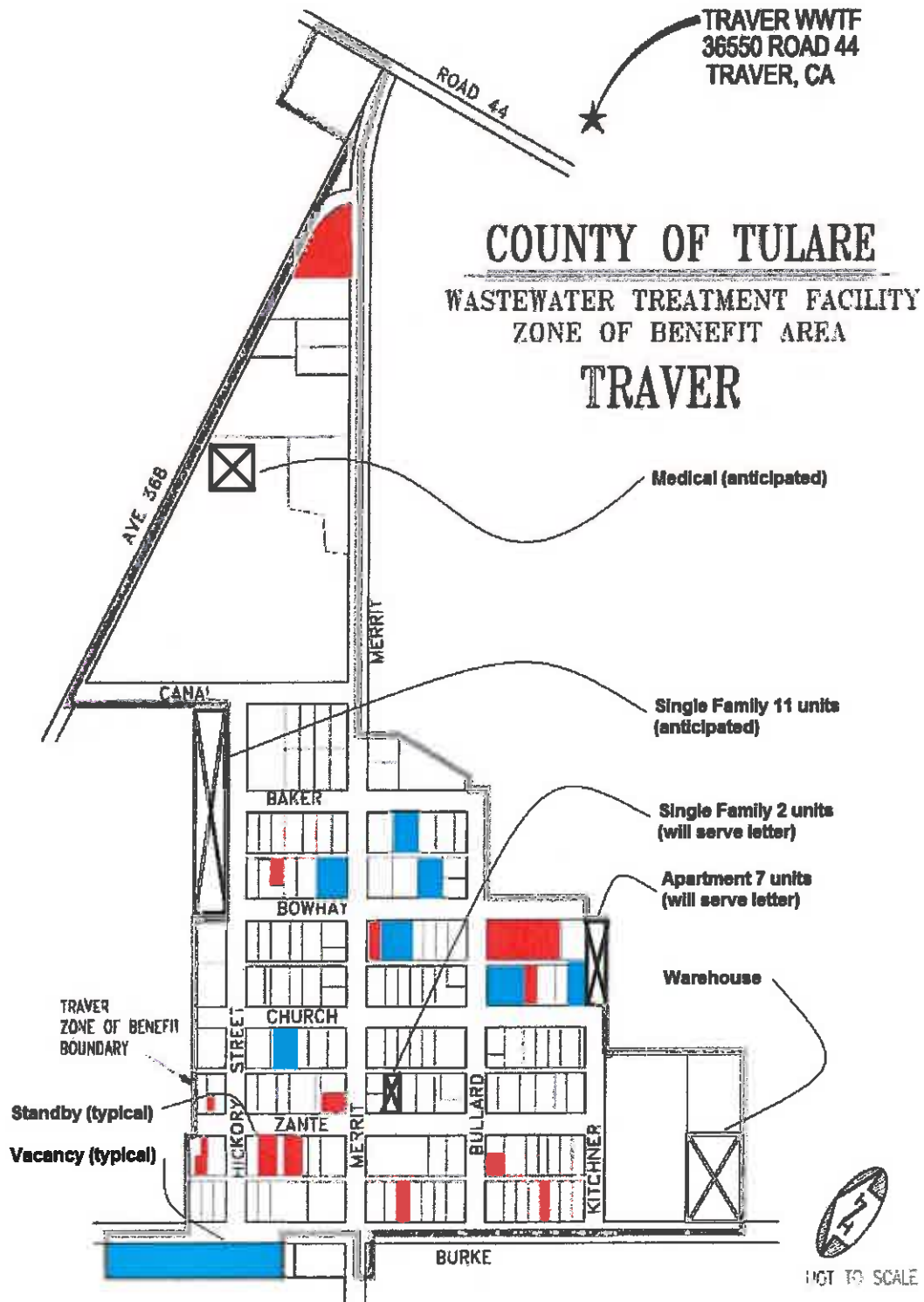
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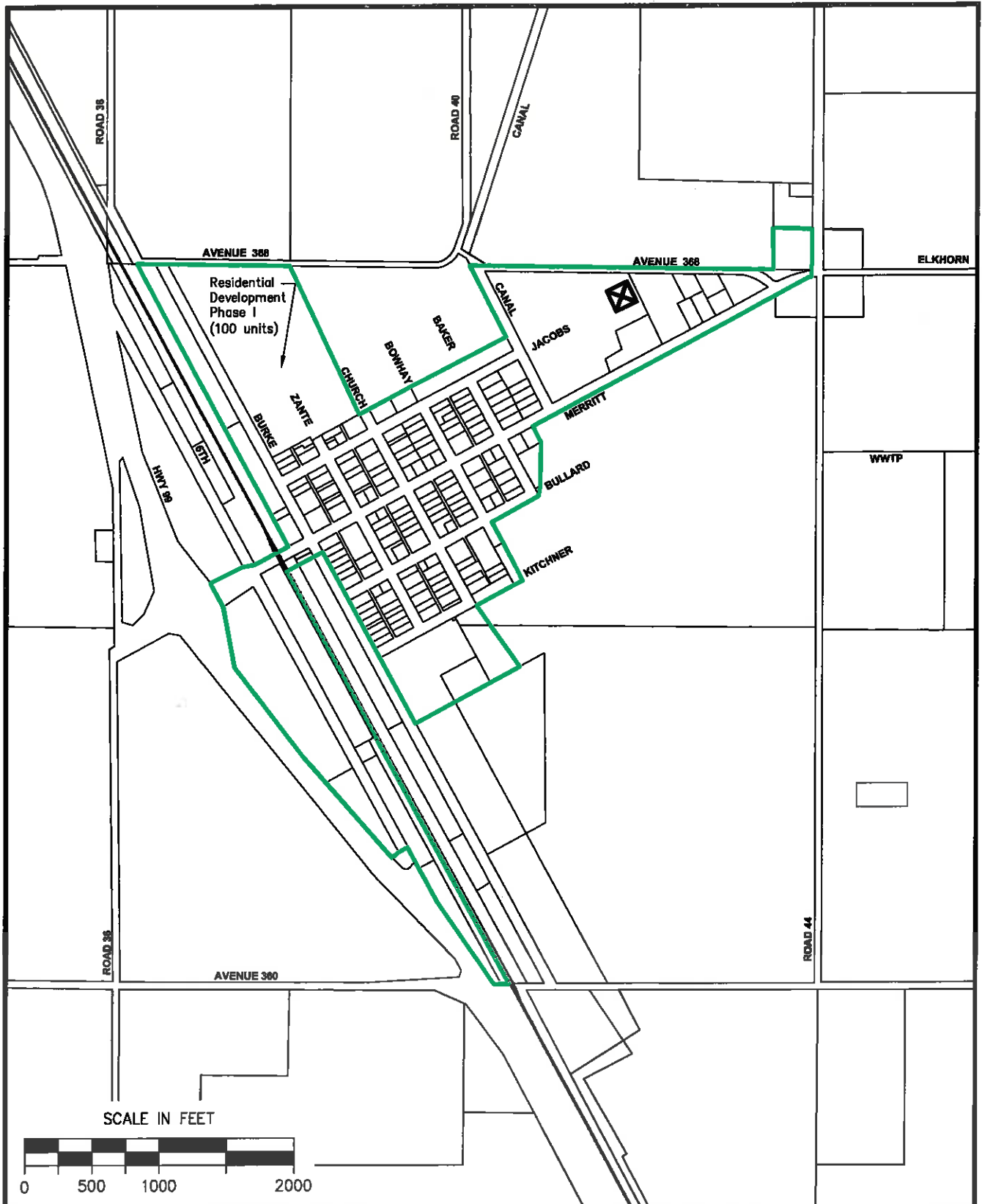


PROVOST & PRITCHARD
 An Employee Owned Company
 2505 Alluvial Ave
 Clovis, CA 93611
 (559) 326-1100

Exhibit 1
Scenario No. 1
Existing Capacity
Traver Sewer Collection and
Wastewater Treatment Study

EXHIBIT 2
ANTICIPATED SEWER CONNECTIONS





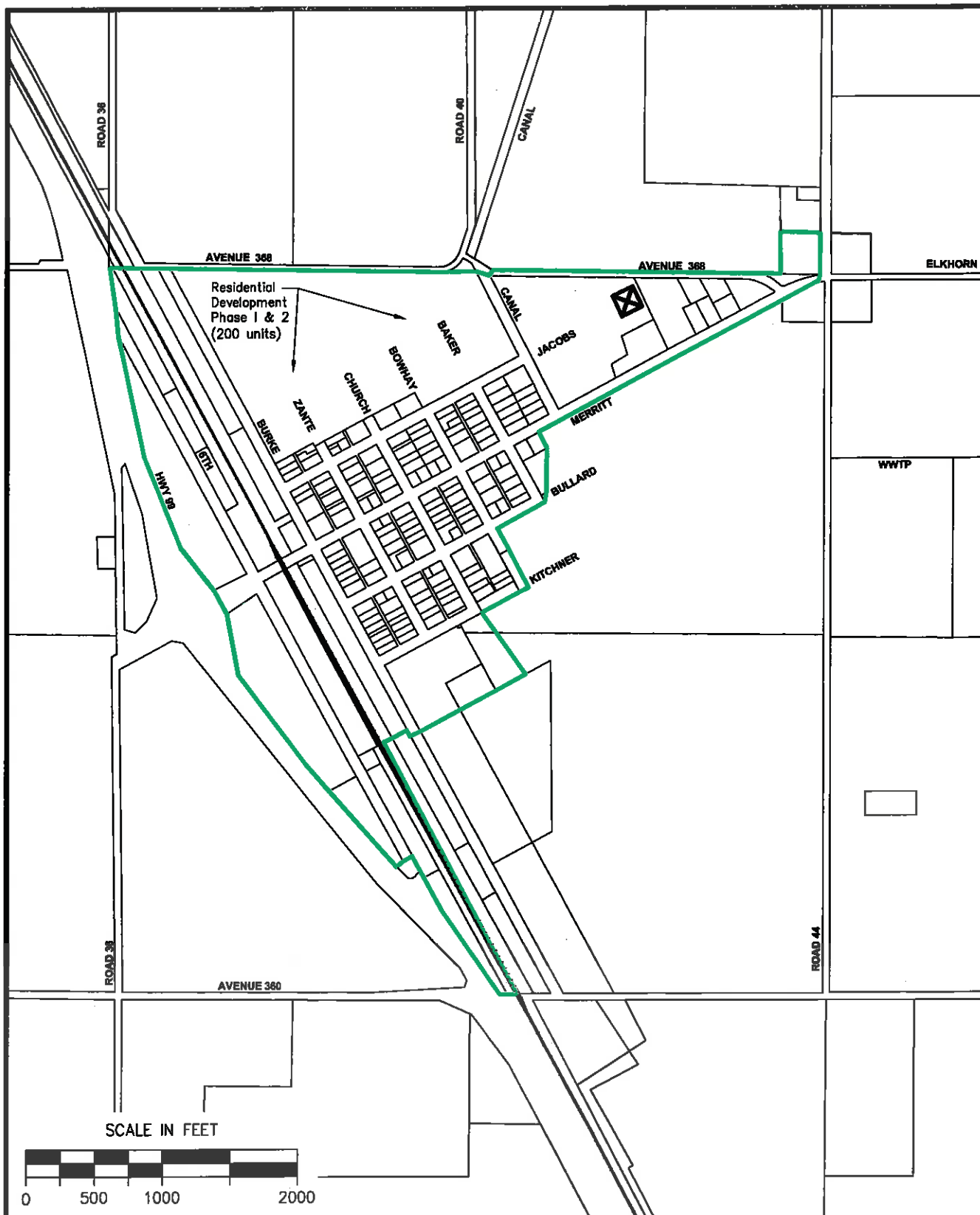
PROVOST & PRITCHARD
 ENGINEERS
 An Employee Owned Company

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 Clovis, CA 93611
 (559) 326-1100



Exhibit 3
Scenario No. 2
 Immediate Future

**Traver Sewer Collection and
 Wastewater Treatment Study**



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 CONSULTING ENGINEERS
 An Employee Owned Company

2505 Alluvial Ave
 Clovis, CA 93611
 (559) 326-1100



Exhibit 4
Scenario No. 3
 Future Development
 Traver Sewer Collection and
 Wastewater Treatment Study



0 1 2 Miles



EST. 1988
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company

130 N. Garden Street
Visalia, CA . 93291
(559) 636-1166

Legend

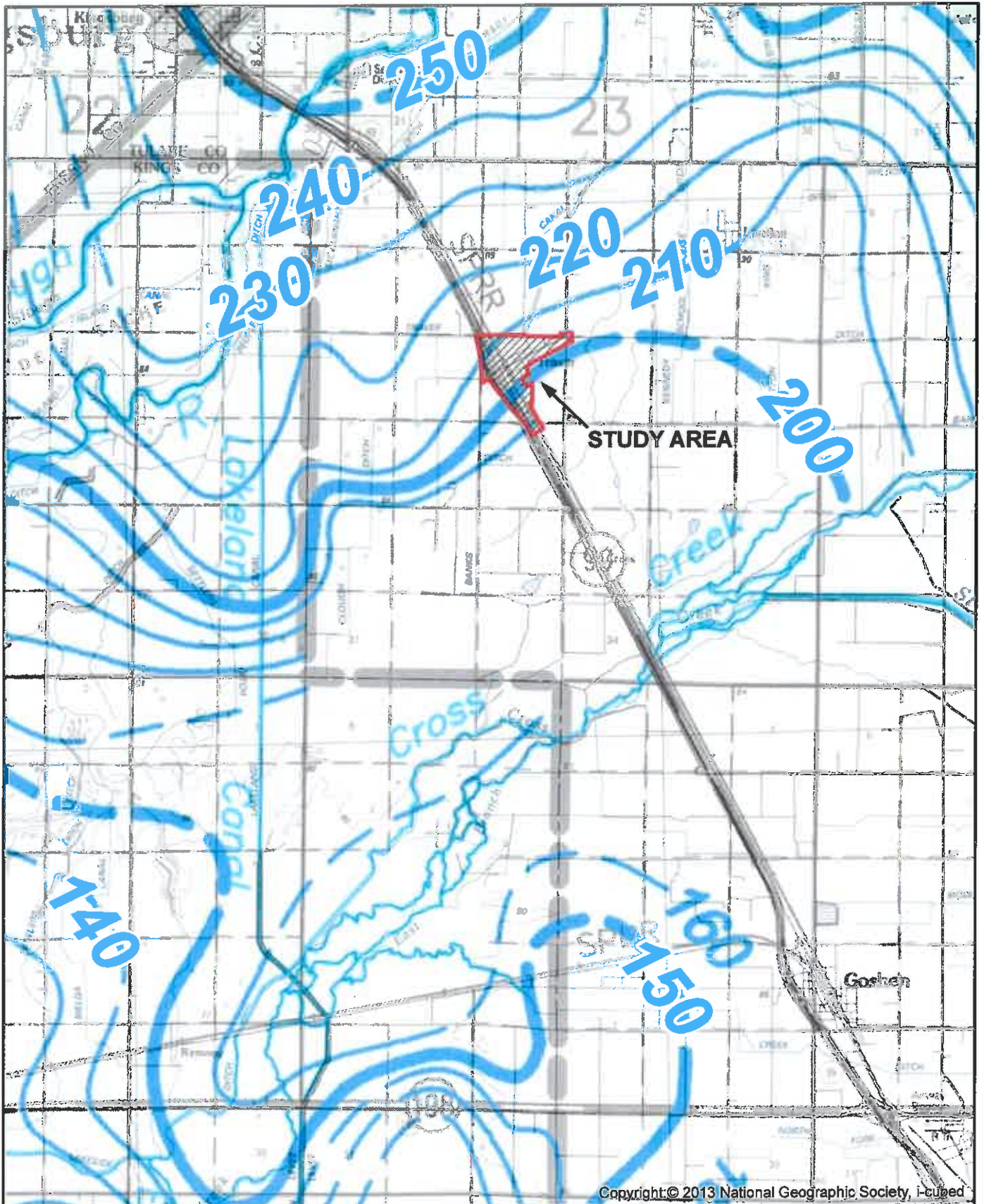


Traver Urban Development Boundary

Exhibit 5

Traver Sewer Collection and
Wastewater Treatment Study

Location



0 1 2 Miles



EST 1964
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company

130 N. Garden Street
Visalia, CA . 93291
(559) 636-1166

Legend



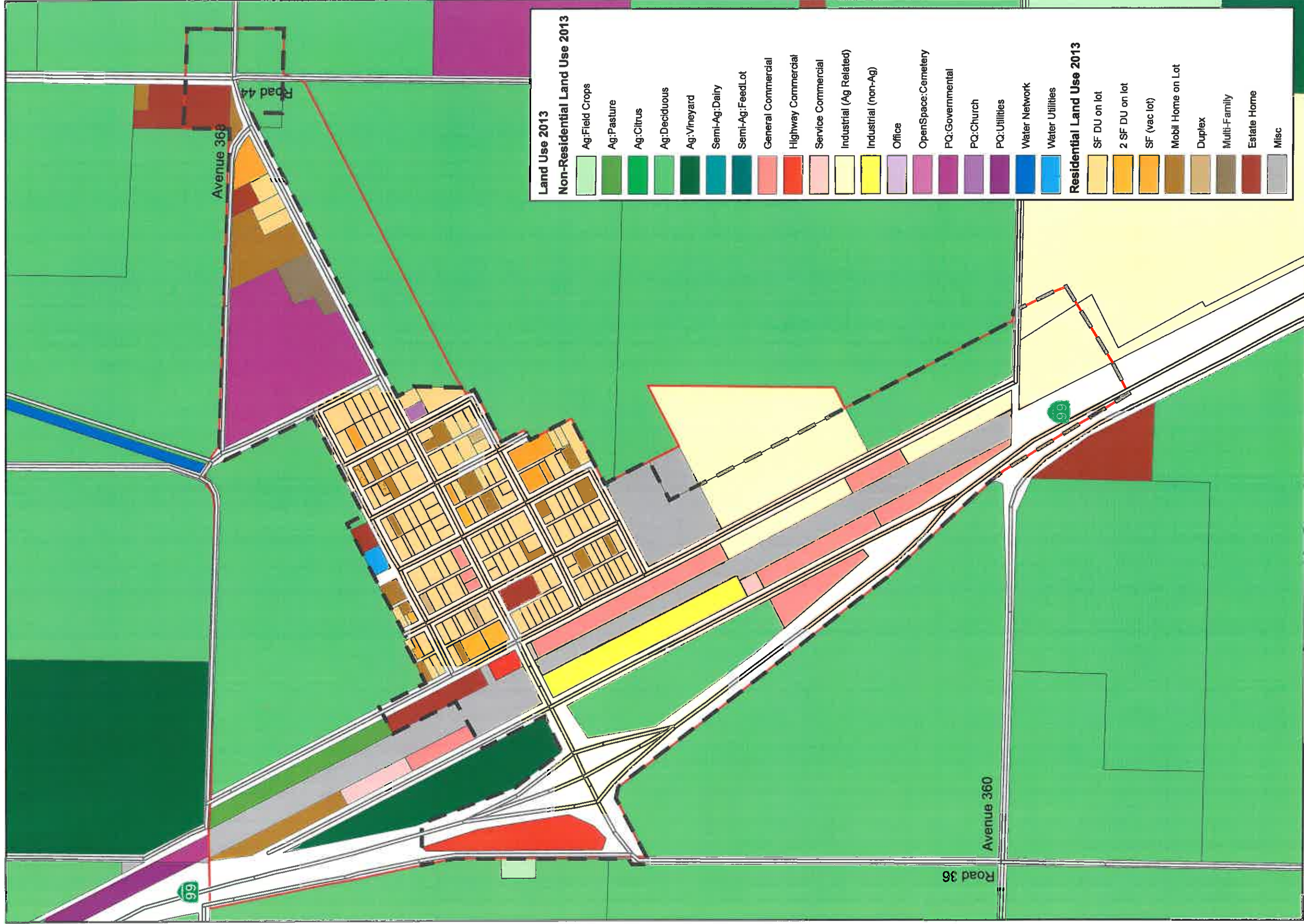
Traver Urban Development Boundary



Elevation of Groundwater, ft (Spring 2010, DWR)

Exhibit 6

Traver Sewer Collection and
Wastewater Treatment Study
Groundwater Elevation



Land Use 2013	
Non-Residential Land Use 2013	
	Ag:Field Crops
	Ag:Pasture
	Ag:Citrus
	Ag:Deciduous
	Ag:Vineyard
	Semi-Ag:Dairy
	Semi-Ag:FeedLot
	General Commercial
	Highway Commercial
	Service Commercial
	Industrial (Ag Related)
	Industrial (non-Ag)
	Office
	OpenSpace:Cemetery
	PQ:Governmental
	PQ:Church
	PQ:Utilities
	Water Network
	Water Utilities
Residential Land Use 2013	
	SF DU on lot
	2 SF DU on lot
	SF (vac lot)
	Mobil Home on Lot
	Duplex
	Multi-Family
	Estate Home
	Misc



Legend

- Tulare County Roads
- Traver Redevelopment Area
- Traver Urban Development Boundary

PROVOST & PRITCHARD
EST. 1968
CONSULTING GROUP
An Employee Owned Company
130 N. Garden Street
Visalia, CA 93291
(559) 636-1166

Exhibit 8
Traver Sewer Collection and
Wastewater Treatment Study

Land Use



Exhibit 9
Existing Sewer
Traver Sewer Collection and
Wastewater Treatment Study
Photography by NAIP 2012

Photography by NAIP 2012

Legend

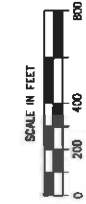
Existing Sewer



A horizontal scale bar labeled "SCALE IN FEET" with markings at 0, 150, 300, and 600 feet.

EST. 1908
**PROVOST &
PRITCHARD**
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Legend

- Existing Sewer
- Proposed Sewer Phase 1
- Proposed Sewer Phase 2
- Proposed Force Main Sewer Phase 2
- Proposed Gravity Sewer Phase 2
- Proposed Sewer Phase 3
- Proposed Parcels Phase 1

Exhibit 10 Existing and Proposed Sewer Traver Sewer Collection and Wastewater Treatment Study

Photography by NAIP 2012

TULARE COUNTY REDEVELOPMENT AGENCY
TRAVER REDEVELOPMENT PROJECT AREA
Sewer Collection and Wastewater Treatment Study
Existing AVERAGE DAILY FLOW

100204B1-DES
mab

Notes	Field ID	Nominal Size (in)	Length (ft)	Slope (ft/ft)	Connections	EDU	ADF (gpd)	ADF (cfs)	Velocity (fps)	d/D (in/in)	
Burk (Kit-Bull)	39	6	428	0.0040	8	8	2,408	0.00373	0.69	0.07	
Burk (Bull-Merr)	38	6	460	0.0040	8	7	4,568	0.00707	0.82	0.09	Post Office?
Burk (Jacob)	36	6	325	0.0050	6	6	1,806	0.00279	0.72	0.06	
Burk (Merr)	37	6	320	0.0059	6	6	3,612	0.00559	0.78	0.06	
Trunk (Burk -Zante)	15	8	400	0.0028	0	0	8,180	0.01266	0.81	0.09	
Zante (Kit -Bull)	35	6	400	0.0050	12	12	3,612	0.00559	0.87	0.09	
Bull (Zante)	21	6	150	0.0147	2	2	602	0.00093	0.53	0.05	
Bull (Zante)	19&20	6	230	0.0086	3	3	903	0.00140	0.58	0.02	
Zante (Bull -Merr)	34	6	460	0.0040	7	7	7,224	0.01118	1.00	0.13	
Zante (Jacob)	32	6	172	0.0050	4	4	1,204	0.00186	0.68	0.06	
Jacob (Zante)	31	6	140	0.0111	2	2	602	0.00093	0.63	0.03	
Zante (Jacob -Merr)	33	6	500	0.0078	10	10	4,816	0.00745	0.89	0.11	
Trunk (Zante-Church)	14	8	400	0.0028	4	2.3	20,905	0.03234	1.13	0.15	Trunk + (1 mkt.) EDU?
Kitchner (church)	1	6	190	0.0010	2	5	1,416	0.00219	0.39	0.09	
Church (Kit - Bull)	29&30	6	781	0.0050	10	10	4,426	0.00685	0.87	0.09	
Bullard (Church)	17&18	6	240	0.0146	2	2	602	0.00093	0.79	0.03	
Church (Bull - Merr)	28	6	460	0.0046	12	12	8,640	0.01337	1.13	0.14	
Church (Jacob - Merr)	27	6	500	0.0116	10	9.5	2,872	0.00444	1.18	0.07	(1 store)
Trunk (Church-Bow)	13	8	400	0.0028	4	4	33,621	0.05202	1.32	0.20	
Bullard (Bowhay)	16	6	150	0.0100	1	1	301	0.00047	0.29	0.05	
Bowhay (Bull - Merr)	26	6	460	0.0091	10	10	3,311	0.00512	1.07	0.07	
Bowhey (Jac-Merr)	25	6	424	0.0100	10	10	3,010	0.00466	1.36	0.07	
Trunk (Bow-Bak)	12	8	400	0.0028	1	1	39,942	0.06180	1.40	0.22	
Baker (Bull-Merr)	24	6	372	0.0211	5	5	1,505	0.00233	1.23	0.05	
Baker (Jac-Merr)	23	6	412	0.0206	10	10	3,010	0.00466	1.38	0.06	
Trunk (Bak -Can)	11	8	385	0.0028	3	3	45,361	0.07018	1.45	0.23	
Canal (Jac-Merr)	22	6	500	0.0120	6	23	6,993	0.01082	1.43	0.09	(1 school)
Trunk (Canal -UP)	10	8	500	0.0028	0	0	52,353	0.08100	1.51	0.25	
Trunk	9	8	371	0.0028	3	5	53,818	0.08327	1.52	0.25	Trunk + (9 unit apt.)
Trunk	8	8	500	0.0028	3	3	54,721	0.08467	1.53	0.25	
Trunk	7	8	500	0.0028	2	2	55,323	0.08560	1.53	0.25	
Trunk (Rd 44)	6	8	450	0.0028	1	1	55,624	0.08606	1.54	0.26	
Trunk	5	8	476	0.0028	0	0	55,624	0.08606	1.54	0.26	
Trunk	4	8	476	0.0028	0	0	55,624	0.08606	1.54	0.26	
Trunk	3	8	477	0.0028	0	0	55,624	0.08606	1.54	0.26	
Trunk	2	8	30	0.0028	0	0	55,624	0.08606	1.54	0.26	
TOTAL					181	200	55,624				

ADF 55,624 gpd
ADF/EDU 301 gpd/EDU
ADF in max. month 331 gpd/EDU

EXHBIT 11a

Traver Sewer Collection and
Wastewater Treatment Study



TULARE COUNTY REDEVELOPMENT AGENCY
TRAVER REDEVELOPMENT PROJECT AREA
Sewer Collection and Wastewater Treatment Study
Scenario 1 AVERAGE DAILY FLOW

100204B1-DES
mab

Notes	Field ID	Nominal Size (in)	Length (ft)	Slope (ft/ft)	Connections	EDU	ADF (gpd)	ADF (cfs)	Velocity (fps)	d/D (in/in)	ADF (gpm)
Burk (Kit-Bull)	39	6	428	0.0040	8	8	2,408	0.00373	0.55	0.06	1.67
Burk (Bull-Merr)	38	6	460	0.0040	8	7	4,568	0.00707	0.67	0.09	3.17 Post Office?
Burk (Jacob)	36	6	325	0.0050	6	6	1,806	0.00279	0.54	0.05	1.25
Burk (Merr)	37	6	320	0.0059	6	6	3,612	0.00559	0.71	0.07	2.51
Trunk (Burk -Zante)	15	8	400	0.0028	0	0	8,180	0.01266	0.67	0.09	5.68
Zante (Kit -Bull)	35	6	400	0.0050	12	12	3,612	0.00559	0.67	0.07	2.51
Bull (Zante)	21	6	150	0.0147	2	2	602	0.00093	0.57	0.02	0.42
Bull (Zante)	19&20	6	230	0.0086	3	3	903	0.00140	0.53	0.03	0.63
Zante (Bull -Merr)	34	6	460	0.0040	7	7	7,224	0.01118	0.77	0.11	5.02
Zante (Jacob)	32	6	172	0.0050	4	4	1,204	0.00186	0.48	0.04	0.84
Jacob (Zante)	31	6	140	0.0111	2	2	602	0.00093	0.51	0.03	0.42
Zante (Jacob -Merr)	33	6	500	0.0078	10	10	4,816	0.00745	0.85	0.08	3.34
Trunk (Zante-Church)	14	8	400	0.0028	4	2.3	20,905	0.03234	0.89	0.14	14.52 Trunk + (1 mkt.)
Kitchner (church)	1	6	190	0.0010	2	5	1,416	0.00219	0.29	0.07	0.98 EDU
Church (Kit - Bull)	29&30	6	781	0.0050	10	10	4,426	0.00685	0.71	0.08	3.07
Bullard (Church)	17&18	6	240	0.0146	2	2	602	0.00093	0.56	0.02	0.42
Church (Bull - Merr)	28	6	460	0.0046	12	12	8,640	0.01337	0.85	0.11	6.00
Church (Jacob - Merr)	27	6	500	0.0116	10	9.5	2,872	0.00444	0.84	0.05	1.99 (1 store)
Trunk (Church-Bow)	13	8	400	0.0028	4	4	33,621	0.05202	1.03	0.17	23.35
Bullard (Bowhay)	16	6	150	0.0100	1	1	301	0.00047	0.40	0.02	0.21
Bowhay (Bull - Merr)	26	6	460	0.0091	10	10	3,311	0.00512	0.80	0.06	2.30
Bowhey (Jac-Merr)	25	6	424	0.0100	10	10	3,010	0.00466	0.81	0.06	2.09
Trunk (Bow-Bak)	12	8	400	0.0028	1	1	39,942	0.06180	1.08	0.19	27.74
Baker (Bull-Merr)	24	6	372	0.0211	5	5	1,505	0.00233	0.85	0.03	1.05
Baker (Jac-Merr)	23	6	412	0.0206	10	10	3,010	0.00466	1.04	0.05	2.09
Trunk (Bak -Can)	11	8	385	0.0028	3	3	45,360	0.07018	1.12	0.20	31.50
JACOBS (CANAL 1)	P11	6	398	0.0000	5	5	1,505	0.00233	0.55	0.05	1.05
JACOBS (CANAL 2)	P12	6	398	0.0120	6	6	3,311	0.00512	0.70	0.07	2.30
Canal (Jac-Merr)	22	6	500	0.0120	6	23	10,304	0.01594	1.25	0.10	7.16 (1 school)
Trunk (Canal -UP)	10	8	500	0.0028	0	0	60,480	0.09358	1.22	0.23	42.00
Trunk	9	8	371	0.0028	3	5	61,945	0.09584	1.23	0.23	43.02 Trunk + (9 unit apt.)
Trunk	8	8	500	0.0028	3	3	62,848	0.09724	1.24	0.23	43.64
Trunk	7	8	500	0.0028	2	2	63,450	0.09817	1.24	0.23	44.06
Trunk (Rd 44)	6	8	450	0.0028	1	1	63,751	0.09864	1.24	0.24	44.27
Trunk	5	8	476	0.0028	0	0	63,751	0.09864	1.24	0.24	44.27
Trunk	4	8	476	0.0028	0	0	63,751	0.09864	1.24	0.24	44.27
Trunk	3	8	477	0.0028	0	0	63,751	0.09864	1.24	0.24	44.27
Trunk	2	8	30	0.0028	0	0	63,751	0.09864	1.24	0.24	44.27
TOTAL					192	211	63,751				

ADF 63,751 gpd
ADF/EDU 301 gpd/EDU
ADF in max. month 331 gpd/EDU

EXHIBIT 11b

Traver Sewer Collection and
Wastewater Treatment Study



TULARE COUNTY REDEVELOPMENT AGENCY
TRAVER REDEVELOPMENT PROJECT AREA
Sewer Collection and Wastewater Treatment Study
Scenario 2 AVERAGE DAILY FLOW

100204B1-DES
mab

Notes	Field ID	Nominal Size (in)	Length (ft)	Slope (ft/ft)	Connections	EDU	ADF (gpd)	ADF (cfs)	Velocity (fps)	d/D (in/in)	ADF (gpm)
Burke (100 Units)	P21	6	1580	0.0105	2	100	30,100	0.04657	1.65	0.17	20.90
6TH	P22	6	2400	0.0097	6	164	49,457	0.07652	2.41	0.36	34.34
Merrit	P23	6	207	0.0097	0	0	49,457	0.07652	2.38	0.35	34.34
Force Main	P24	8	4240	0.0105	0	0	79,557	0.12309	2.63	0.39	55.25
Gravity Road 44	P25	12	1500	0.0105	0	0	79,557	0.12309	2.45	0.15	55.25
TOTAL					8	264	79,557				

ADF 79,557 gpd
ADF/EDU 301 gpd/EDU
ADF in max. month 338 gpd/EDU

EXHBIT 11c

Traver Sewer Collection and
Wastewater Treatment Study



TULARE COUNTY REDEVELOPMENT AGENCY
TRAVER REDEVELOPMENT PROJECT AREA
Sewer Collection and Wastewater Treatment Study
Scenario 3 AVERAGE DAILY FLOW

100204B1-DES
mab

Notes	Field ID	Nominal Size (in)	Length (ft)	Slope (ft/ft)	Connections	EDU	ADF (gpd)	ADF (cfs)	Velocity (fps)	d/D (in/in)	ADF (gpm)
Burke (100 Units)	P21	6	1580	0.01049	2	100	30,100	0.04657	2.02	0.24	20.90
6th North	P31	6	1500	0.00968	4	49	14,649	0.02267	1.70	0.19	10.17
Merrit	P23	6	207	0.00968	0	0	14,649	0.02267	2.66	0.40	10.17
Force Main	P24	8	4240	0.01049	0	0	44,749	0.06924	2.89	0.48	31.08
Gravity Road 44	P25	12	1500	0.01049	0	0	44,749	0.06924	2.73	0.18	31.08
TOTAL					6	149	44,749				

ADF 44,749 gpd
ADF/EDU 301 gpd/EDU
ADF in max. month 338 gpd/EDU

EXHBIT 11d

Traver Sewer Collection and
Wastewater Treatment Study



TULARE COUNTY REDEVELOPMENT AGENCY
TRAVER REDEVELOPMENT PROJECT AREA
Sewer Collection and Wastewater Treatment Study
Existing PEAK FLOW

100204B1-DES
mab

Notes	Field ID	Nominal Size (in)	Length (ft)	Slope (ft/ft)	Connections	EDU	PF (gpd)	PF (cfs)	Velocity (fps)	d/D (in/in)	PF (gpm)
Burk (Kit-Bull)	39	6	428	0.0040	8	8	6,459	0.00999	0.76	0.11	4.49
Burk (Bull-Merr)	38	6	460	0.0040	8	7	12,253	0.01896	0.92	0.15	8.51 Post Office?
Burk (Jacob)	36	6	325	0.0050	6	6	4,844	0.00750	0.75	0.09	3.36
Burk (Merr)	37	6	320	0.0059	6	6	9,689	0.01499	0.98	0.12	6.73
Trunk (Burk -Zante)	15	8	400	0.0028	0	0	21,942	0.03395	0.93	0.15	15.24
Zante (Kit -Bull)	35	6	400	0.0050	12	12	9,689	0.01499	0.93	0.12	6.73
Bull (Zante)	21	6	150	0.0147	2	2	1,615	0.00250	0.78	0.04	1.12
Bull (Zante)	19&20	6	230	0.0086	3	3	2,422	0.00375	0.74	0.06	1.68
Zante (Bull -Merr)	34	6	460	0.0040	7	7	19,378	0.02998	1.05	0.18	13.46
Zante (Jacob)	32	6	172	0.0050	4	4	3,230	0.00500	0.67	0.07	2.24
Jacob (Zante)	31	6	140	0.0111	2	2	1,615	0.00250	0.71	0.04	1.12
Zante (Jacob -Merr)	33	6	500	0.0078	10	10	12,919	0.01999	1.18	0.13	8.97
Trunk (Zante-Church)	14	8	400	0.0028	4	2.3	56,072	0.08676	1.23	0.23	38.94
Kitchner (church)	1	6	190	0.0010	2	5	3,797	0.00587	0.40	0.12	2.64
Church (Kit - Bull)	29&30	6	781	0.0050	10	10	11,871	0.01837	0.98	0.14	8.24
Bullard (Church)	17&18	6	240	0.0146	2	2	1,615	0.00250	0.78	0.04	1.12
Church (Bull - Merr)	28	6	460	0.0046	12	12	23,175	0.03586	1.17	0.19	16.09
Church (Jacob - Merr)	27	6	500	0.0116	10	9.5	7,703	0.01192	1.16	0.09	5.35
Trunk (Church-Bow)	13	8	400	0.0028	4	4	90,180	0.13953	1.41	0.29	62.62
Bullard (Bowhay)	16	6	150	0.0100	1	1	807	0.00125	0.55	0.03	0.56
Bowhay (Bull - Merr)	26	6	460	0.0091	10	10	8,882	0.01374	1.11	0.10	6.17
Bowhey (Jac-Merr)	25	6	424	0.0100	10	10	8,074	0.01249	1.12	0.10	5.61
Trunk (Bow-Bak)	12	8	400	0.0028	1	1	107,135	0.16576	1.48	0.32	74.40
Baker (Bull-Merr)	24	6	372	0.0211	5	5	4,037	0.00625	1.18	0.06	2.80
Baker (Jac-Merr)	23	6	412	0.0206	10	10	8,074	0.01249	1.44	0.08	5.61
Trunk (Bak -Can)	11	8	385	0.0028	3	3	121,669	0.18825	1.53	0.34	84.49
Canal (Jac-Merr)	22	6	500	0.0120	6	23	18,756	0.02902	1.54	0.14	13.03
Trunk (Canal -UP)	10	8	500	0.0028	0	0	140,425	0.21727	1.59	0.37	97.52
Trunk	9	8	371	0.0028	3	5	144,353	0.22335	1.60	0.37	100.25
Trunk	8	8	500	0.0028	3	3	146,775	0.22709	1.61	0.38	101.93
Trunk	7	8	500	0.0028	2	2	148,390	0.22959	1.62	0.38	103.05
Trunk (Rd 44)	6	8	450	0.0028	1	1	149,197	0.23084	1.62	0.38	103.61
Trunk	5	8	476	0.0028	0	0	149,197	0.23084	1.62	0.38	103.61
Trunk	4	8	476	0.0028	0	0	149,197	0.23084	1.62	0.38	103.61
Trunk	3	8	477	0.0028	0	0	149,197	0.23084	1.62	0.38	103.61
Trunk	2	8	30	0.0028	0	0	149,197	0.23084	1.62	0.38	103.61
TOTAL					181	200	149,197				

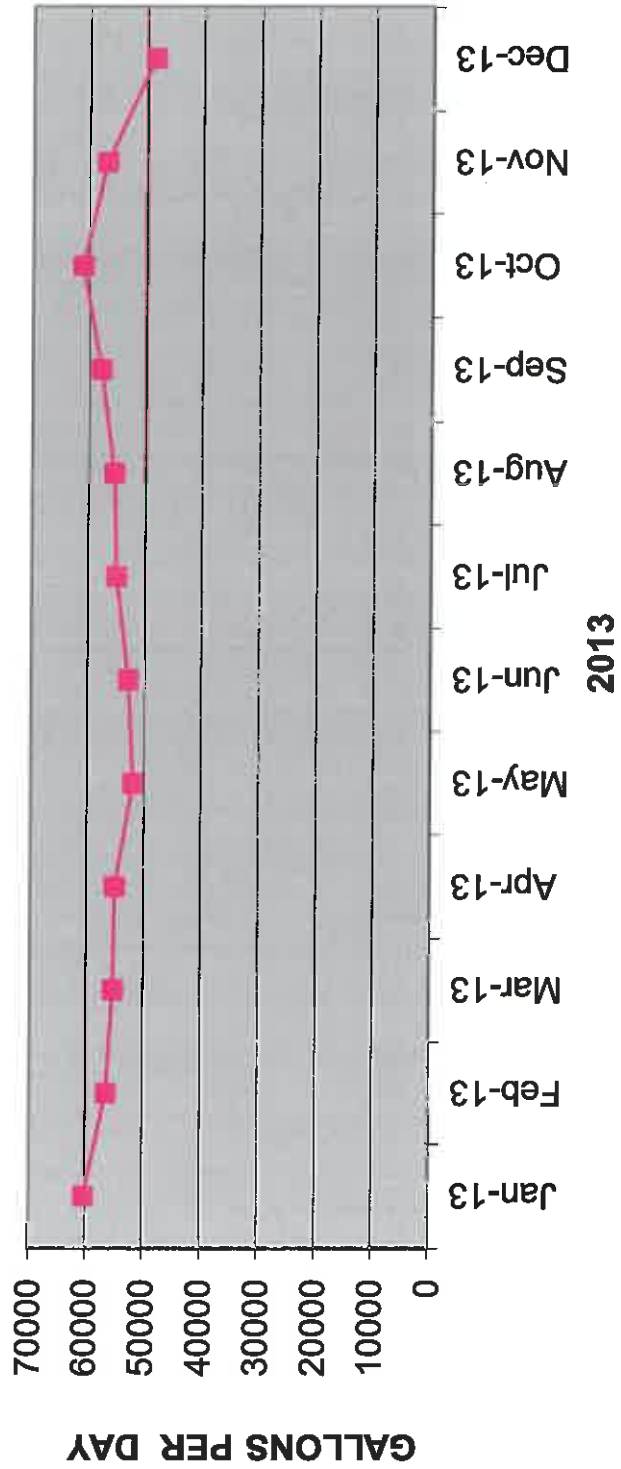
PEAKING FACTOR 3
Peak Flow 161,309 gpd
PF/EDU 807 gpd/EDU

EXHBIT 12

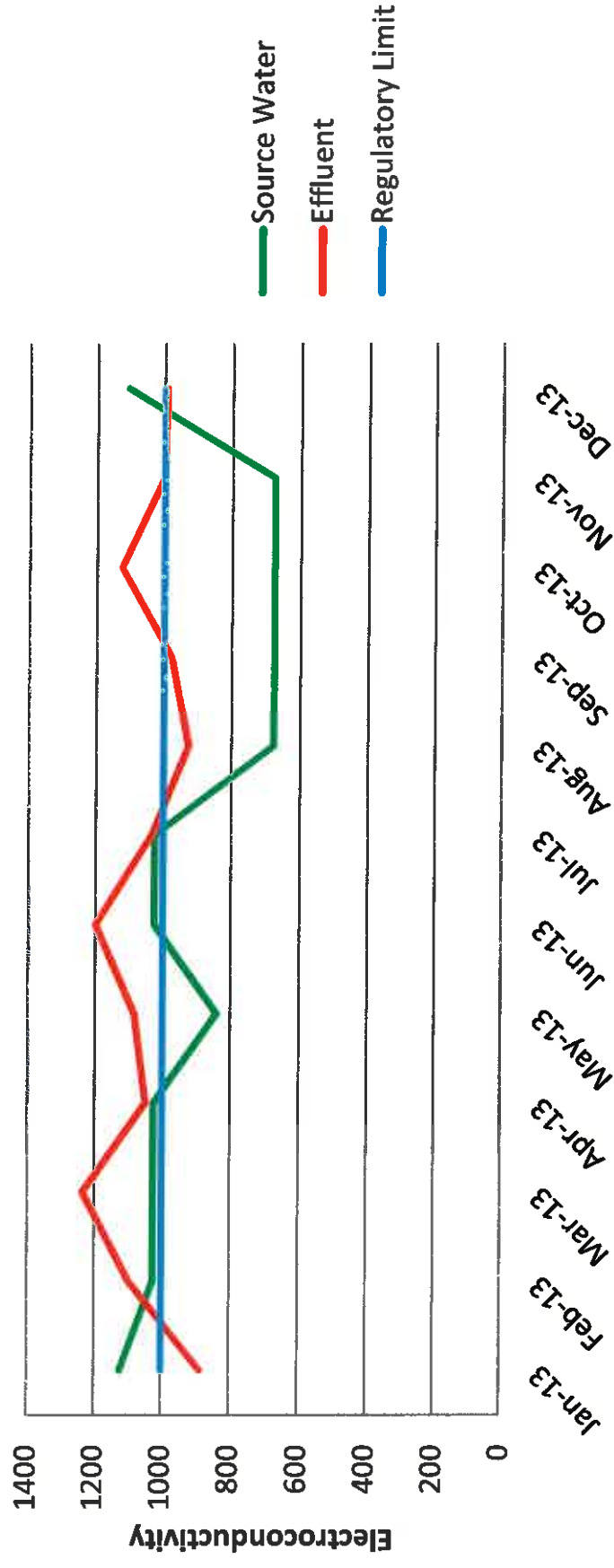
Traver Sewer Collection and
Wastewater Treatment Study



TRAVER WWTP FLOWS



Traver WWTP Electroconductivity

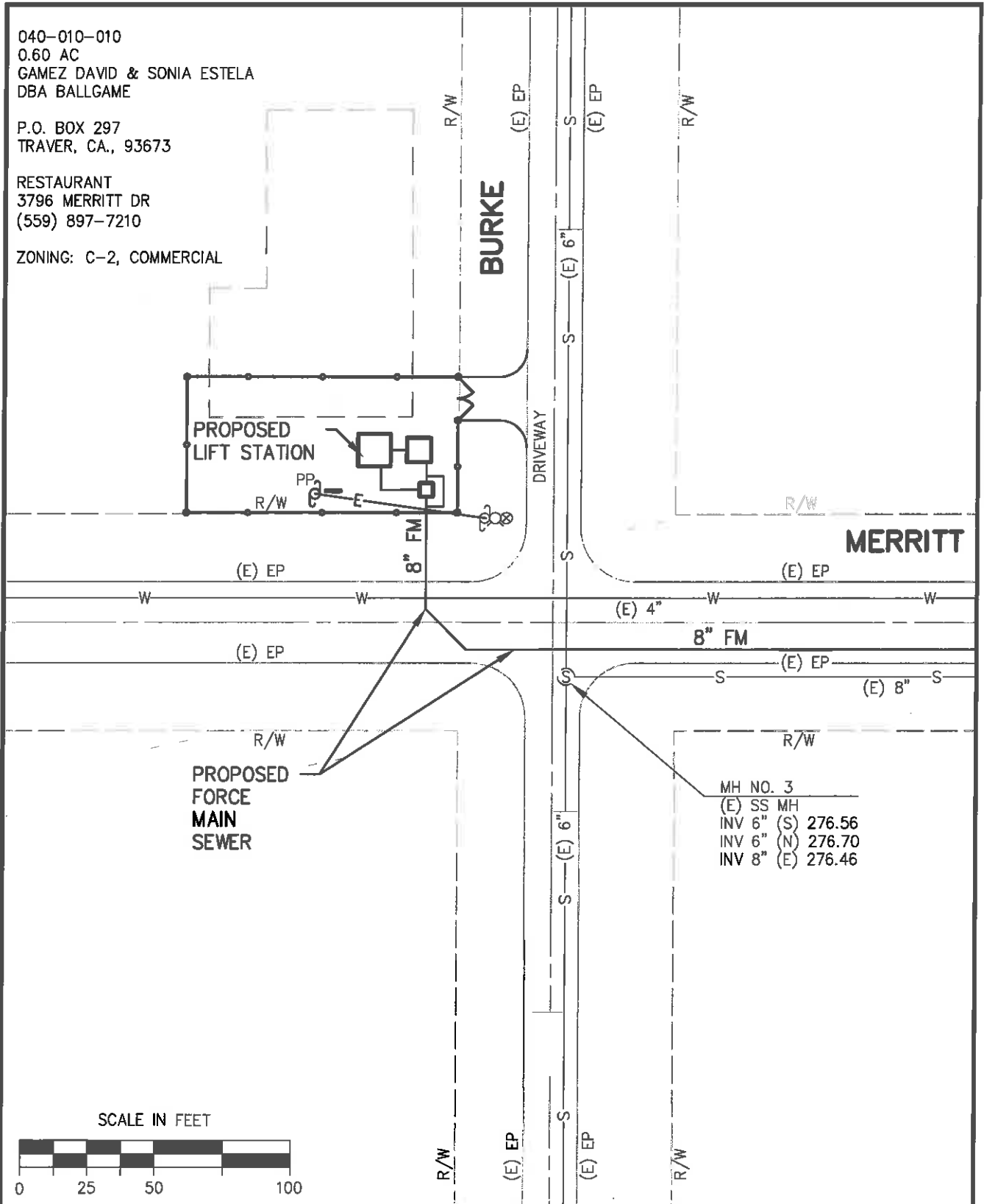


040-010-010
0.60 AC
GAMEZ DAVID & SONIA ESTELA
DBA BALLGAME

P.O. BOX 297
TRAVER, CA., 93673

RESTAURANT
3796 MERRITT DR
(559) 897-7210

ZONING: C-2, COMMERCIAL

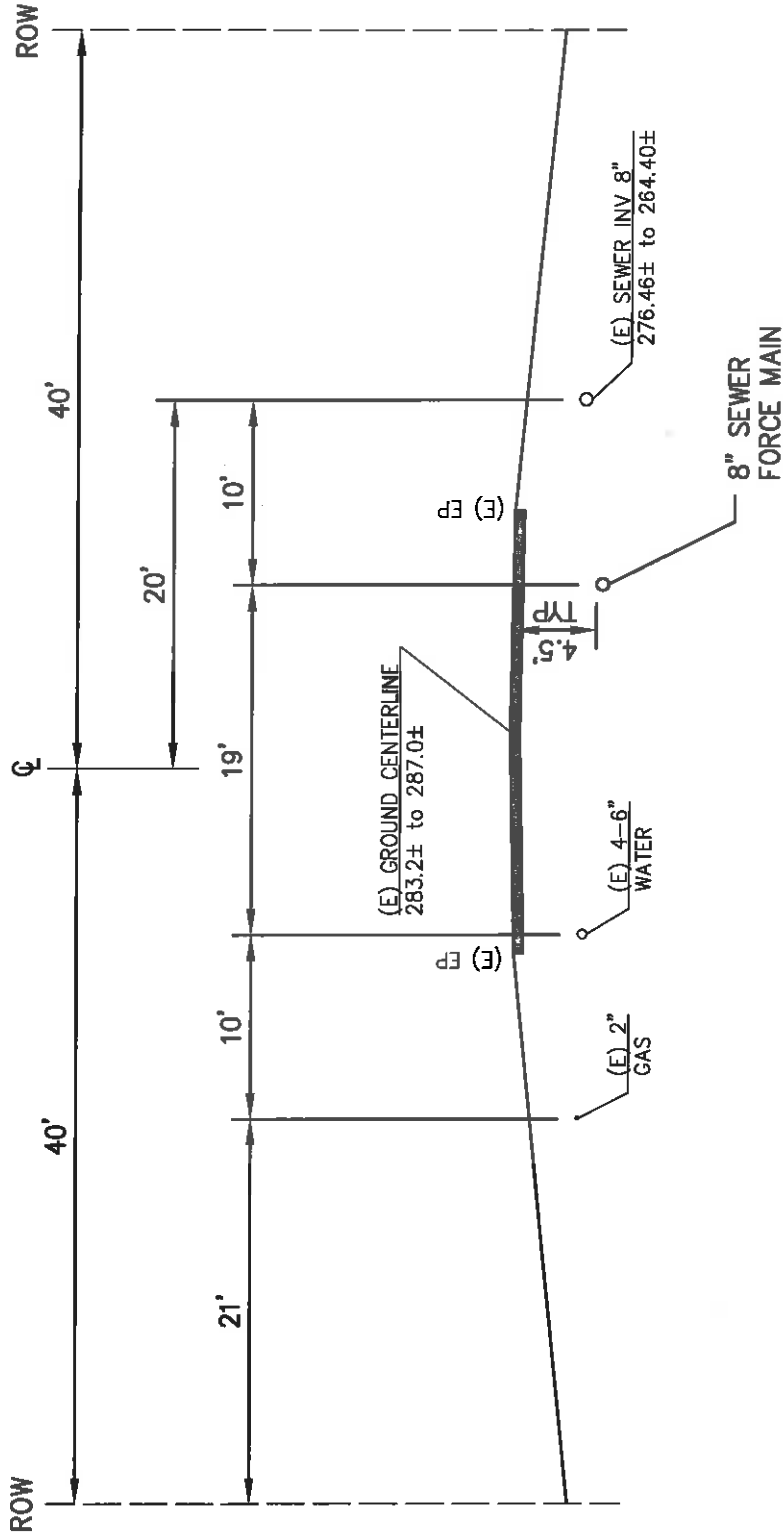


PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company

2505 Alluvial Ave
Clovis, CA 93611
(559) 326-1100

Exhibit 15 Proposed Lift Station

**Traver Sewer Collection and
Wastewater Treatment Study**



SCALE IN FEET

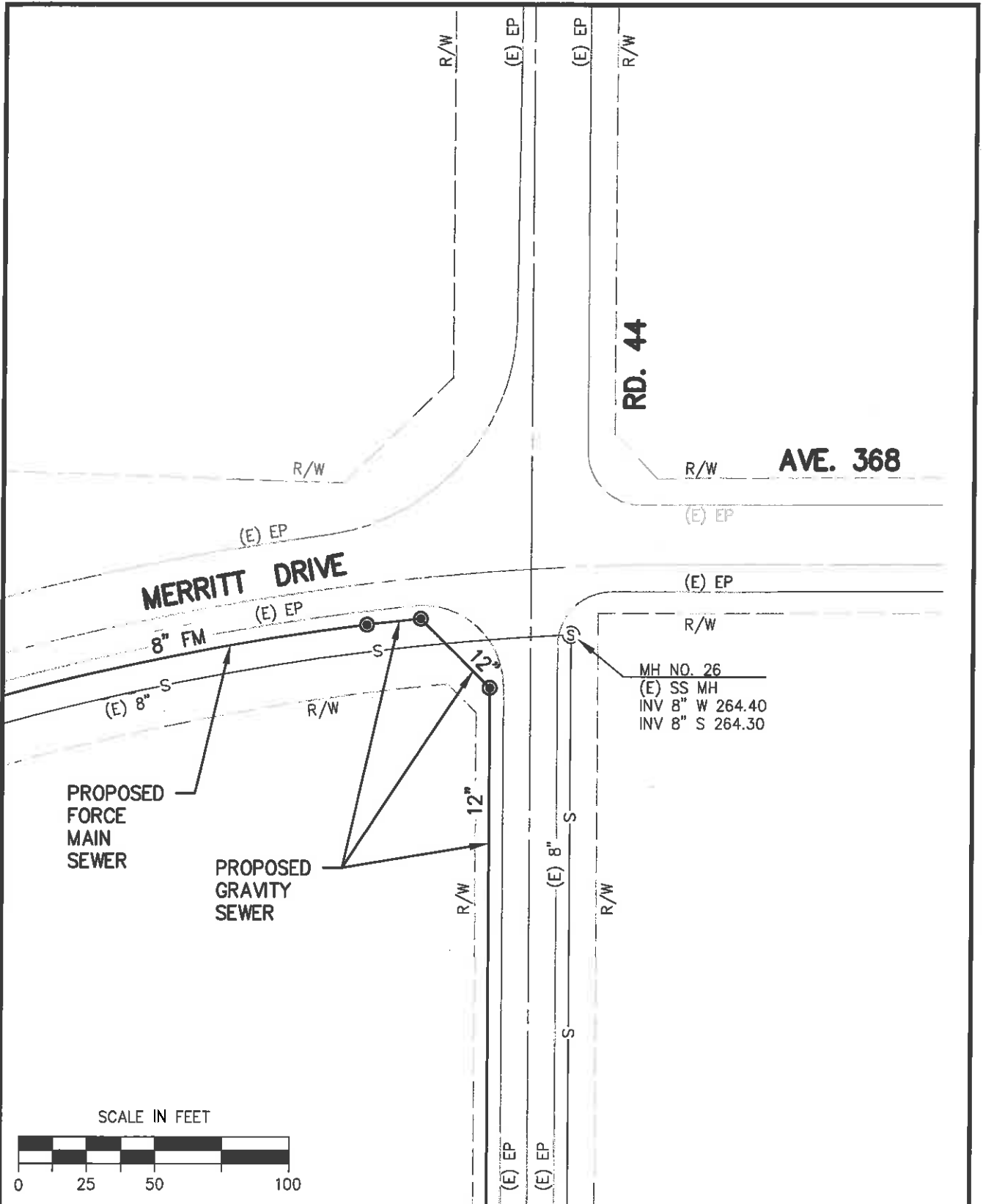


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Clovis, CA 93611
(559) 328-1100

Exhibit 16 Force main in Merritt Drive - Typical Section

Traver Sewer Collection and
Wastewater Treatment Study

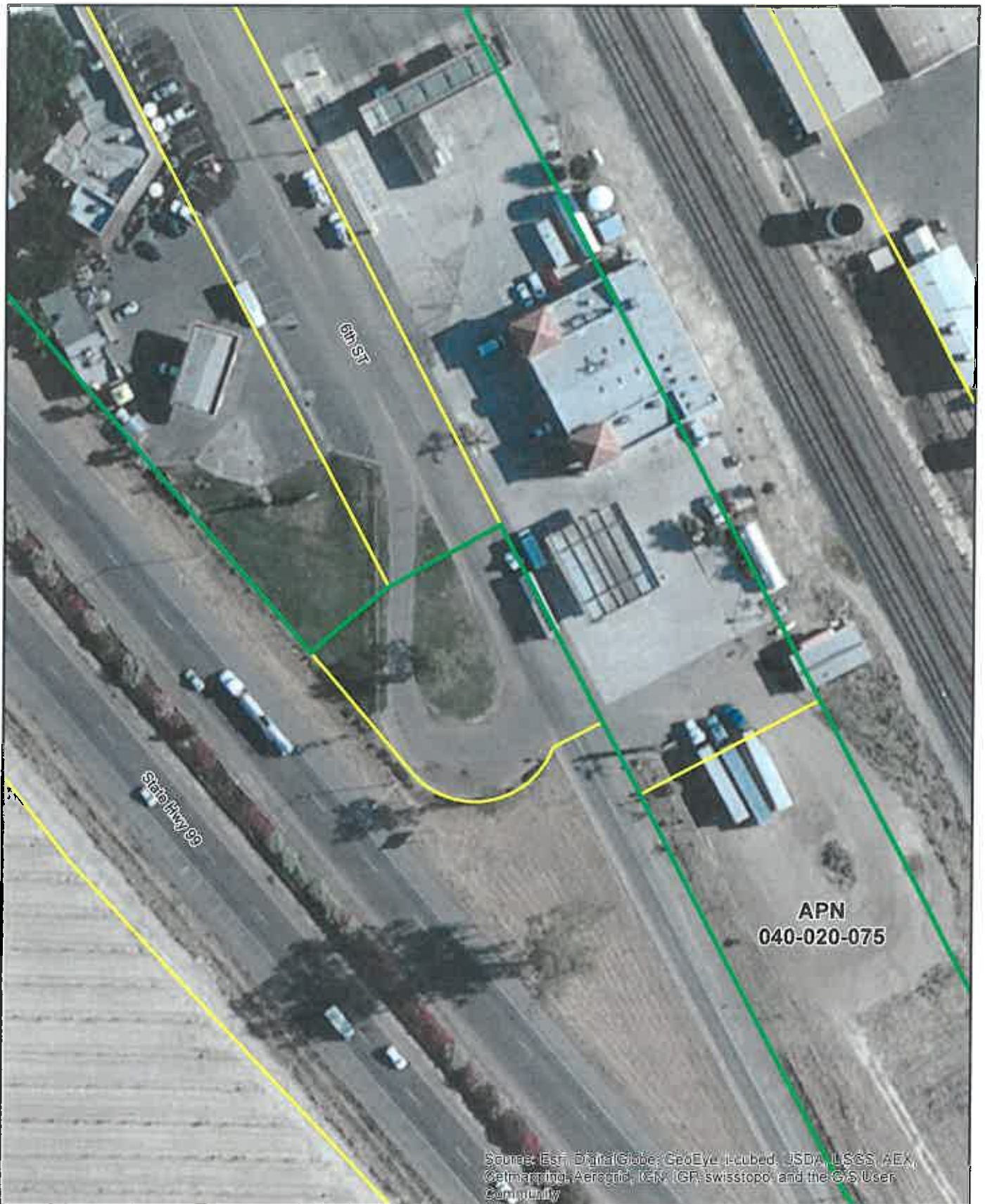


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Clovis, CA 93611
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Exhibit 17 **Merritt Dr. at Avenue 368 & Road 44**

**Traver Sewer Collection and
Wastewater Treatment Study**



0 20 40 60 80 100 Feet

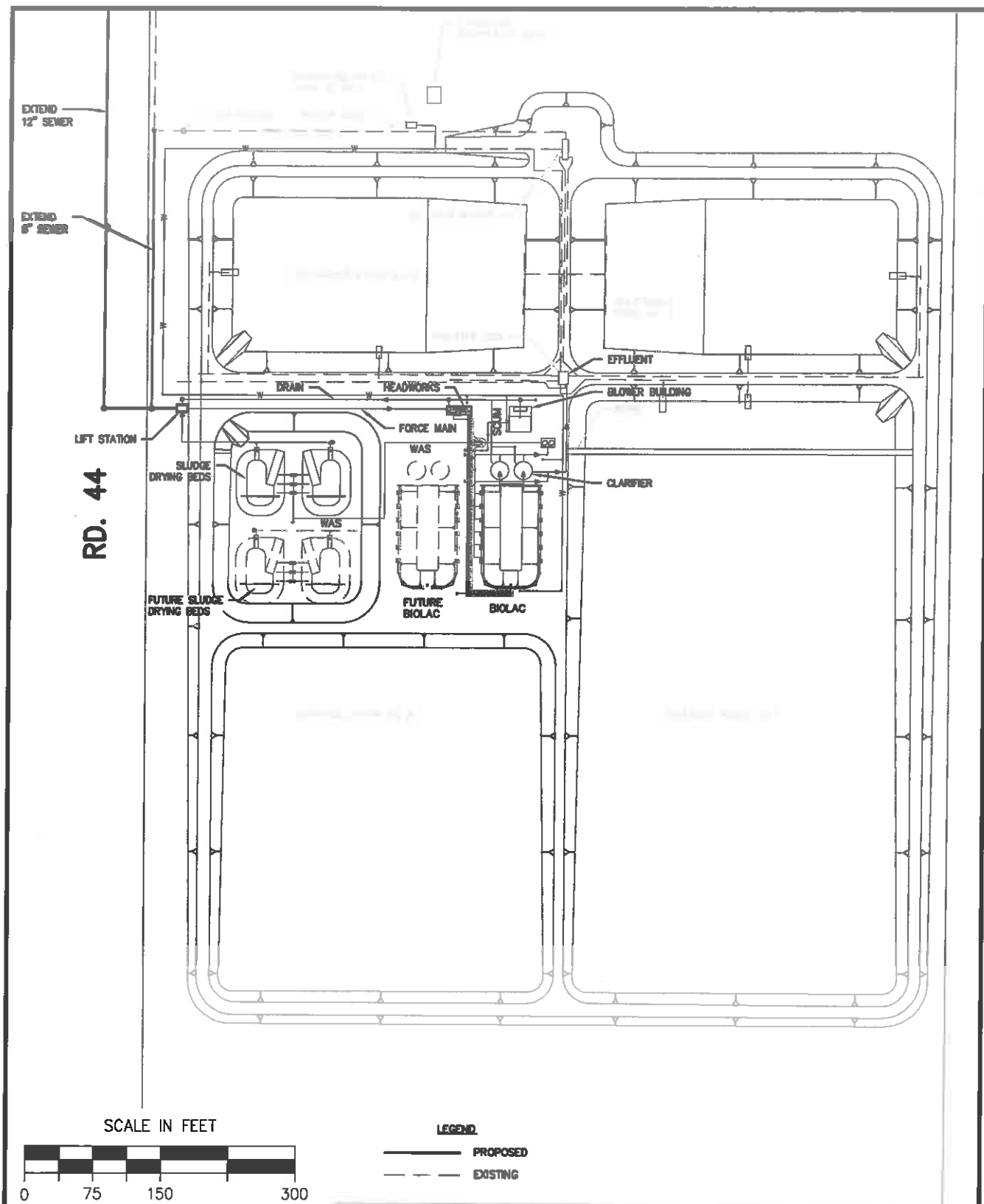


EST. 1968
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130 N. Garden Street
 Visalia, CA . 93291
 (559) 636-1166

Exhibit 18

Traver Sewer Collection and
 Wastewater Treatment Study
 Frontage of APN 040-020-075



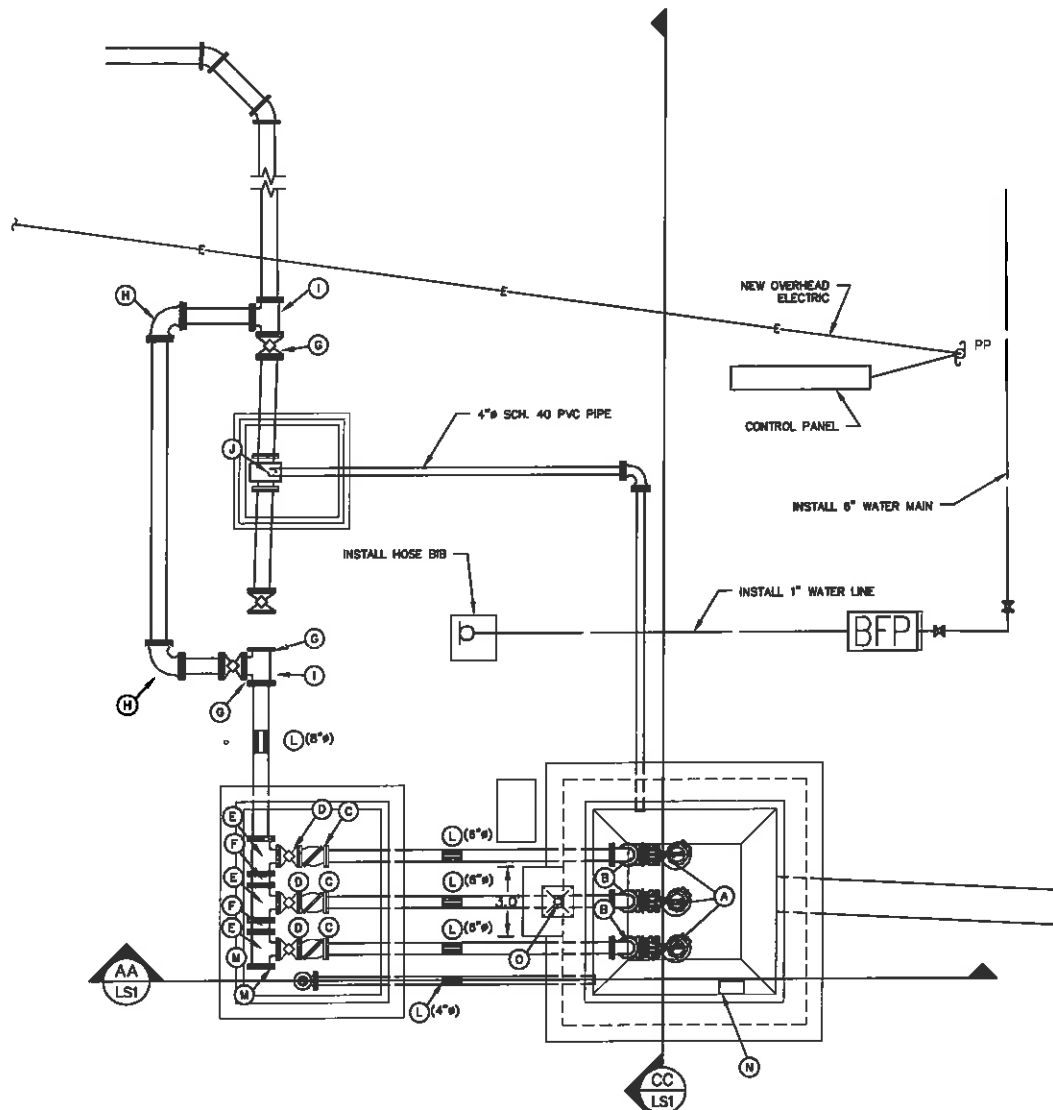
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Clovis, CA 93611
(559) 326-1100

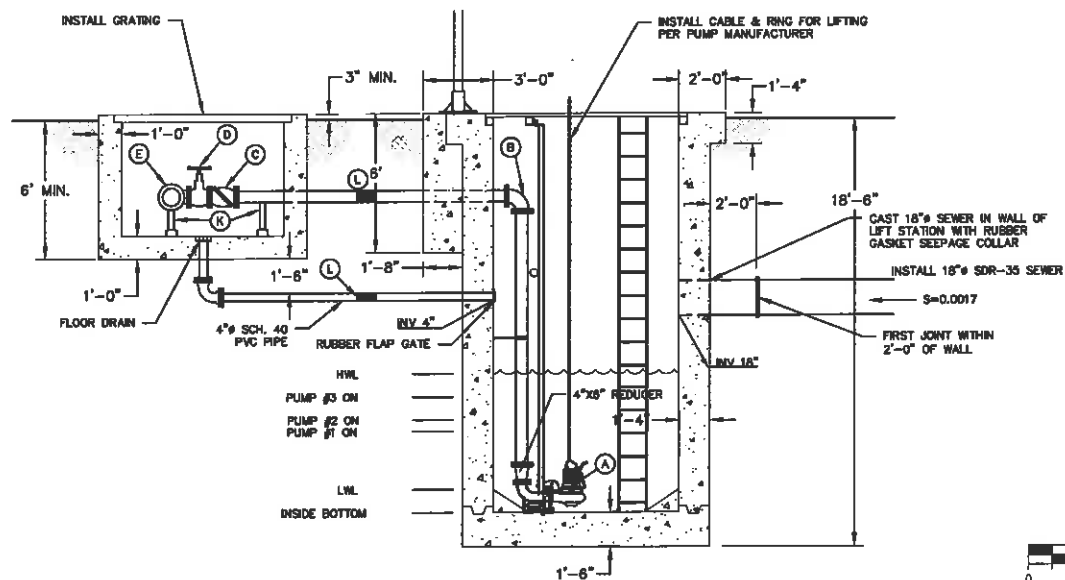


Exhibit 19 Conceptual Waste Water Treatment Plant

Traver Sewer Collection and
Wastewater Treatment Study



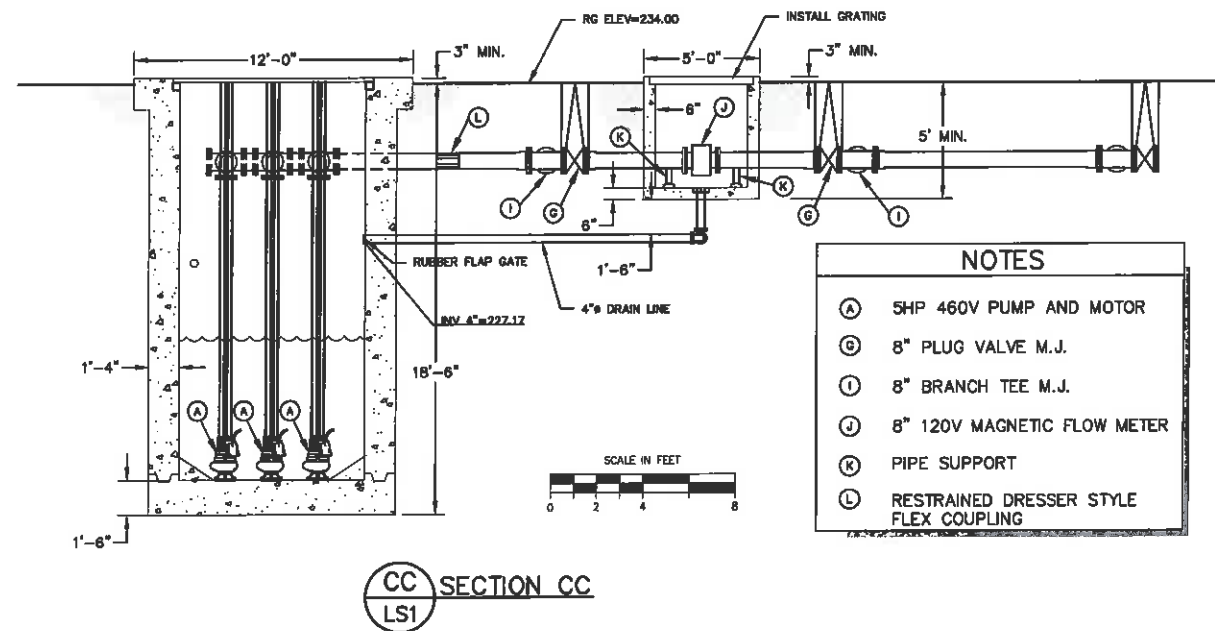
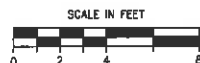
A
LS1
INFLUENT PUMP STATION PLAN VIEW



AA
LS1
SECTION AA

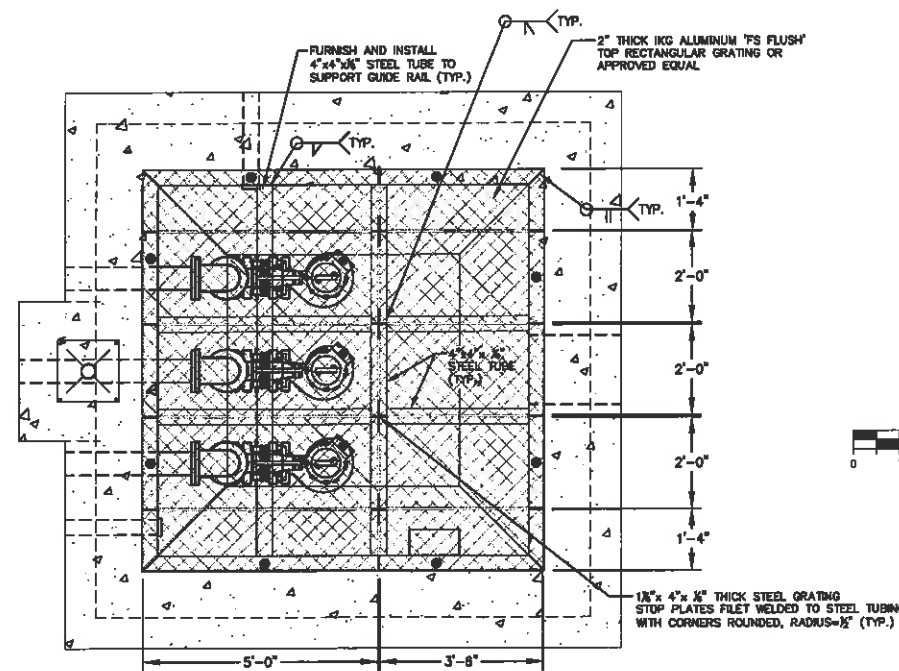
NOTE:
INSTALL NON-SHRINK GROUT FOR WALL RESTRAINTS AFTER VALVE BOX, FLOW METER BOX AND WET WELL PIPING IS COMPLETELY ASSEMBLED

- NOTES**
- (A) 5HP 460V PUMP
 - (B) 6" 90° BEND FLG.
 - (C) 6" CHECK VALVE FLG.
 - (D) 6" PLUG VALVE FLG.
 - (E) 8" X 6" REDUCING TEE FLG.
 - (F) 8" SPOOL FLG.
 - (G) 8" PLUG VALVE M.J.
 - (H) 8" 90° BEND M.J.
 - (I) 8" BRANCH TEE M.J.
 - (J) 8" 120V MAGNETIC FLOW METER
 - (K) PIPE SUPPORT
 - (L) RESTRAINED DRESSER STYLE FLEX COUPLING
 - (M) 8" BLIND FLANGE
 - (N) LEVEL CONTROL 120V
 - (O) 115V HOIST

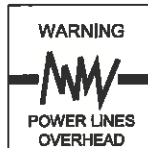


CC
LS1
SECTION CC

- NOTES**
- (A) 5HP 460V PUMP AND MOTOR
 - (G) 8" PLUG VALVE M.J.
 - (I) 8" BRANCH TEE M.J.
 - (J) 8" 120V MAGNETIC FLOW METER
 - (K) PIPE SUPPORT
 - (L) RESTRAINED DRESSER STYLE FLEX COUPLING



GRATING OVER WET WELL



Know what's below.
Call before you dig.

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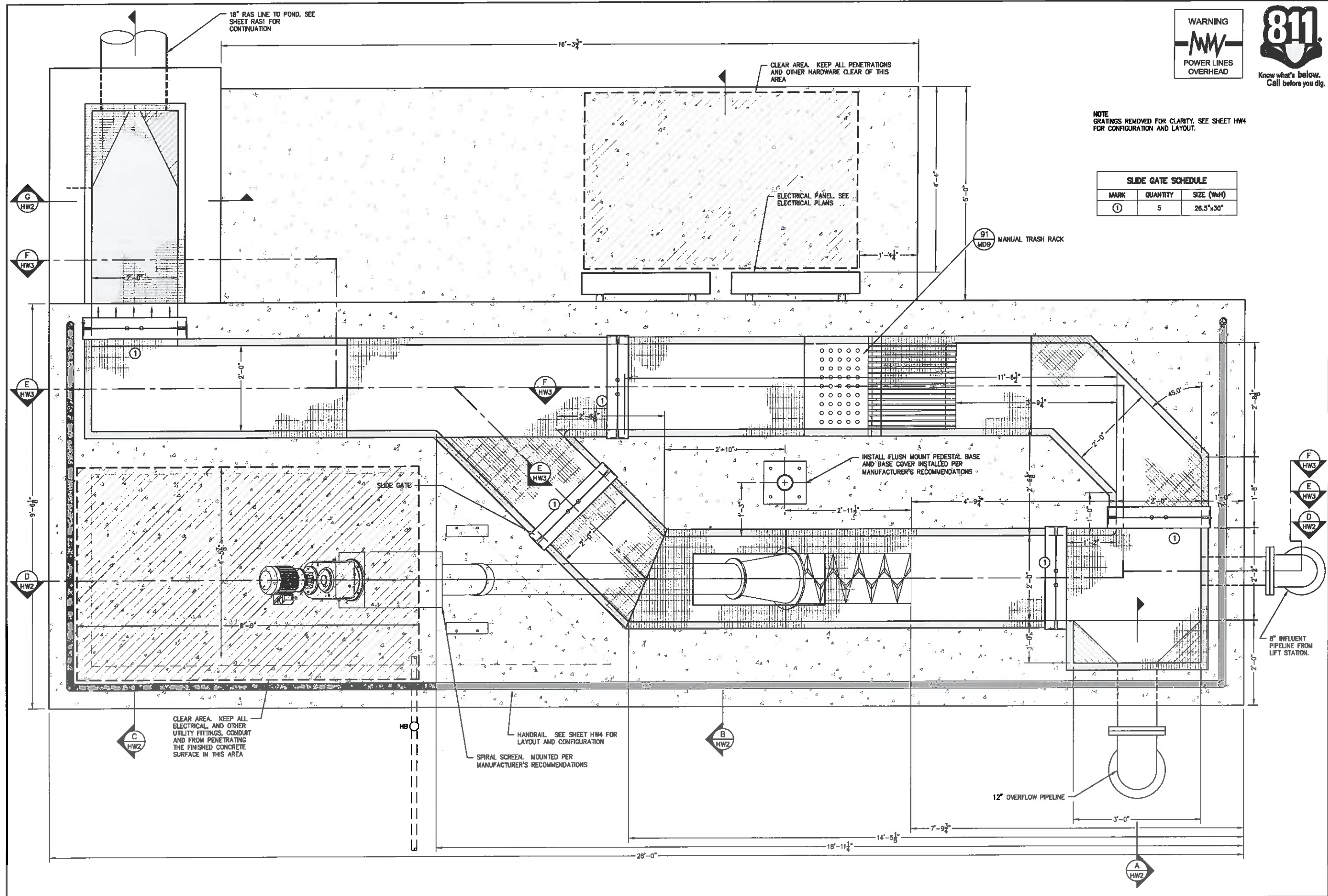
DATE	BY	REVISION

FOR REVIEW ONLY

TRAVER WASTEWATER REVIEW
TULARE COUNTY
TYPICAL LIFT STATION

PROVOST & PRITCHARD
ENGINEERING GROUP, INC.
An Employee Owned Company
CLARK, CALIFORNIA 93811-1168
555/728-1100 FAX 555/728-1090
www.ppgroup.com

DESIGN ENGINEER:
MICHAEL TAYLOR
LICENSE NO:
39961
DRAFTED BY: STG
CHECKED BY: MGT
DATE: 6-18-2014
JOB NO: 139914C2
ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET
LS1



NOTE:
GRATINGS REMOVED FOR CLARITY. SEE SHEET HW4
FOR CONFIGURATION AND LAYOUT.

SLIDE GATE SCHEDULE		
MARK	QUANTITY	SIZE (WxH)
①	5	26.5"x30"

EXHIBIT 22

FOR REVIEW ONLY

TRAVER WASTEWATER REVIEW
TULARE COUNTY

HEADWORKS PLAN VIEW

PROVOST & PRITCHARD
ENGINEERING & ARCHITECTURE
An Employee Owned Company
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CLONES, CALIFORNIA 93811-8166
559/258-1100 FAX 559/258-1090
www.provostpritchard.com

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39961
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STG
CHECKED BY:
NGT
DATE: 6-18-2014
JOB NO: 139914C2
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INCHES. ADJUST SCALE FOR
REDUCED OR ENLARGED PLANS.
SHEET

HW1



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EXHIBIT 23

FOR
REVIEW
ONLY

TRAVEL WASTEWATER REVIEW

TULARE COUNTY

HEADWORKS SECTIONS

No.

DEFINITION

BY	DATE
----	------

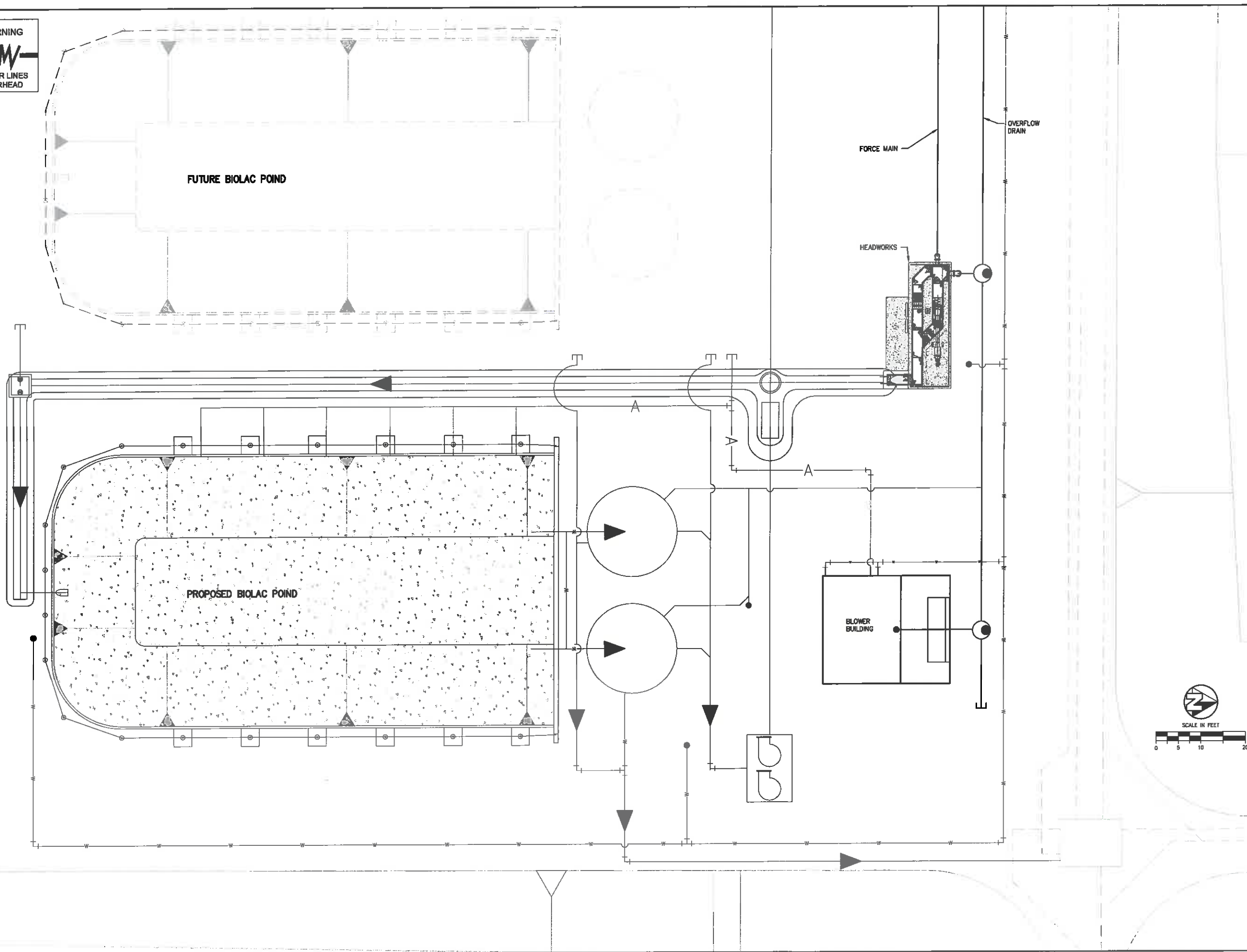
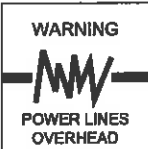
Private fees

PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
2505 ALFALFA AVENUE
CLONES, CALIFORNIA 93111-9166
559/328-1100 FAX 559/328-1090
www.ppgrp.com

0 1
ORIGINAL SCALE SHOWN IS IN
INCHES. ADJUST SCALE FOR
REDUCED OR ENLARGED PLANS.
SHEET

HW2

[illegible]



6/11/2014 4:31 PM \\veehib\dev\ch\clintn\tulare County of-13991\139914C2-Traver Wastewater Rebuild\Drawings\Tulare NCI AC SYSTEM LAYOUT.dwg -Shelton Orner

BL

ORIGINAL SCALE SHOWN IS IN INCHES. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS. SHEET

JOB NO: 139914C2

DATE: 6-18-2014

DRAFTED BY: STG

CHECKED BY: MGT

LICENSE NO: 39961

DESIGN ENGINEER: MICHAEL TAYLOR

PROVOST & PRITCHARD

CONSULTING ENGINEERS

44 Employees Owned Company

2505 ALLIANCE AVENUE

CLOVIS, CALIFORNIA 93611-9166

559/225-1100 FAX 559/225-1090

www.ppj.com

TRAVER WASTEWATER REVIEW

TULARE COUNTY

BIOLAC SYSTEM LAYOUT

FOR REVIEW ONLY

EXHIBIT 24

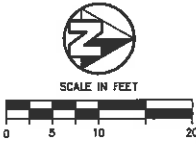
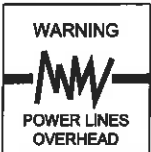
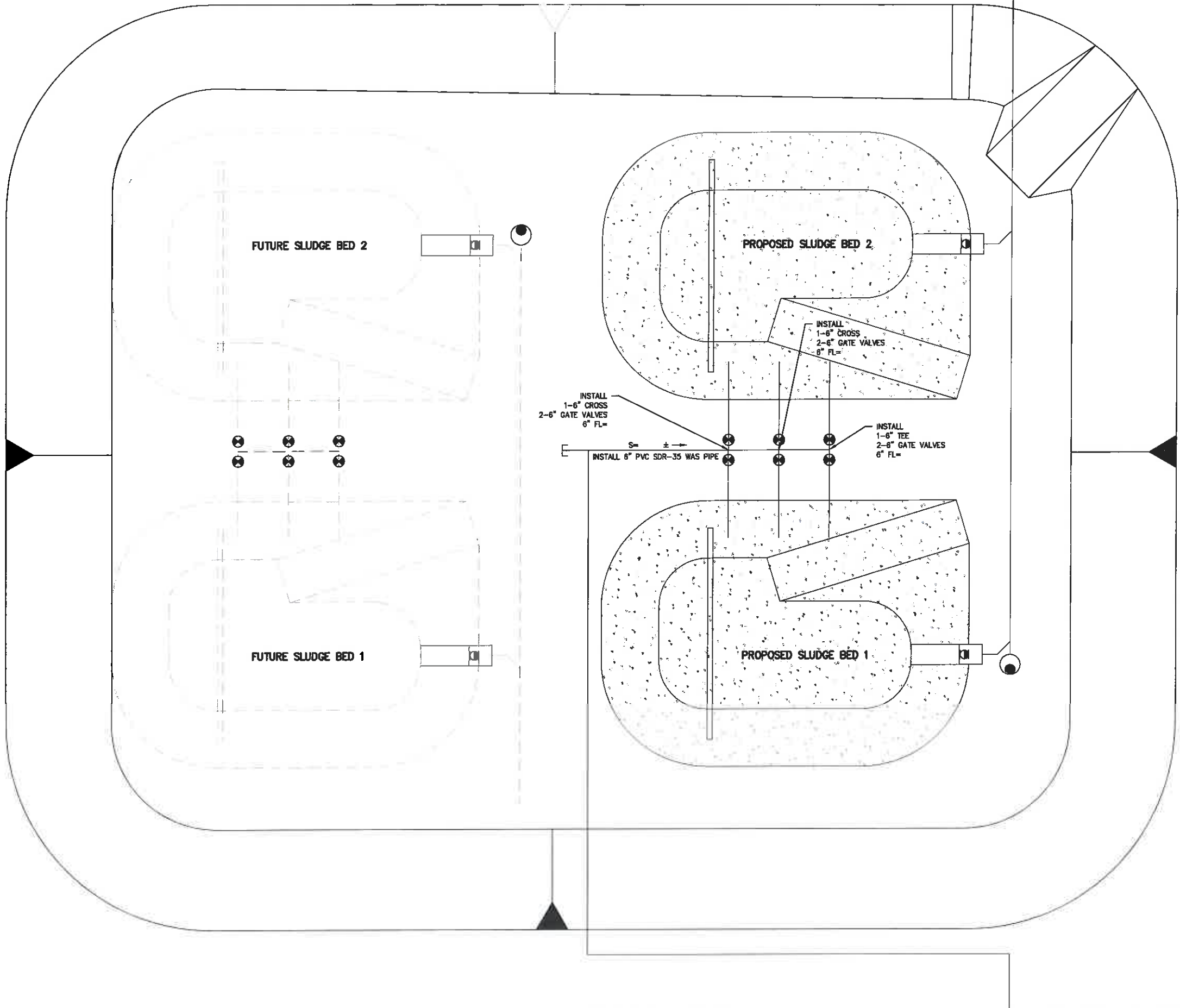
NO.

REVISION

BY

DATE

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FOR REVIEW ONLY

TRAVER WASTEWATER REVIEW
TULARE COUNTY
SLUDGE BED SITE PLAN

PROVOST & PRITCHARD

4th Employee Owned Company

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CLONE, CALIFORNIA 93611-8106
559/338-1100 FAX 559/328-1000
www.pandp.com

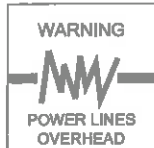
DESIGN ENGINEER:
MICHAEL TAYLOR
LICENSE NO:
33961
DRAFTED BY: STG
CHECKED BY: MGT
DATE: 6-18-2014
JOB NO: 139914C2
ORIGINAL SCALE SHOWN IS IN
INCHES. ADJUST SCALE FOR
REDUCED OR ENLARGED PLANS.
SHEET

SD1

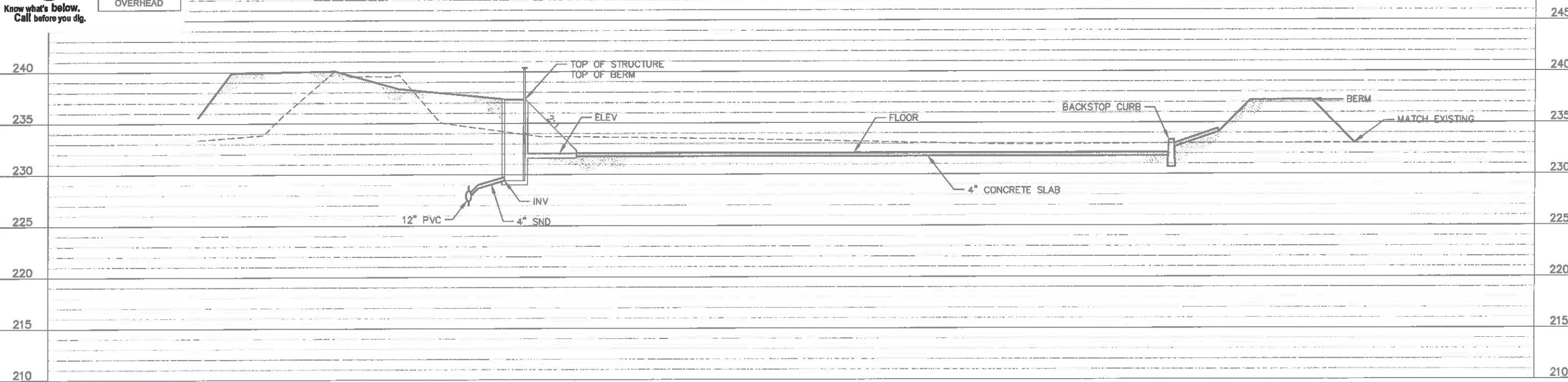
EXHIBIT 25

REVISION
BY
DATE

8/11/2014 4:31 PM \\vandk\dev\dmh\Clina\Tulare County\4-139914C2-Traver Wastewater Review\DWG\SHIFT\SD1 SLUDGE BED SITE PLAN.dwg -Rishan Gaur

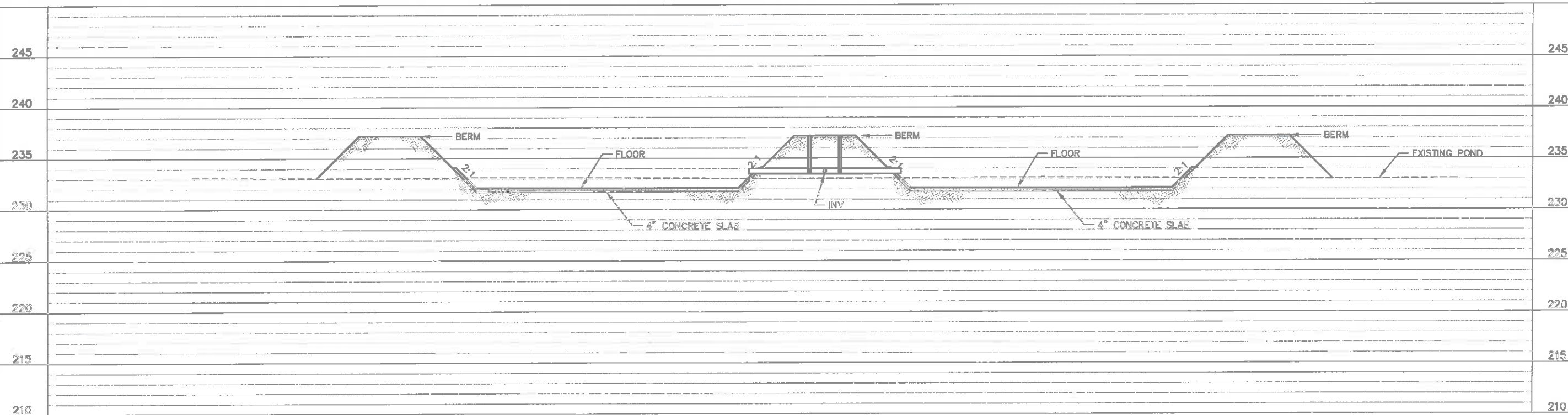


SCALE: HORIZ=1"=10' VERT=1"=5'



A
SD2 SECTION OF SLUDGE DRYING BED

SCALE: HORIZ=1"=10' VERT=1"=5'



B
SD2 SECTION OF SLUDGE DRYING BED

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EXHIBIT 26

FOR REVIEW ONLY

TRAVER WASTEWATER REVIEW
TULARE COUNTY

SLUDGE DRYING BED SECTIONS

PROVOST & PRITCHARD
CONSULTING ENGINEERS
400 Broadway Street, Suite 200
Clovis, CA 93611-1000
559/325-1100 FAX 559/325-1090
www.ppri.com

DESIGN ENGINEER:
MICHAEL TAYLOR
LICENSE NO:
39961
DRAFTED BY: STG CHECKED BY: MGT
DATE: 6-16-2014
JOB NO: 139914C2

ORIGINAL SCALE SHOWN IS IN
INCHES. ADJUST SCALE FOR
REDUCED OR ENLARGED PLANS.
SHEET
SD2

EXHIBIT 28

Preliminary Estimate of Overall Cost

Item No.	Item Description	Unit Price	Scenario 1		Scenario 2		Scenario 3	
			Estimated Quantity	Cost	Estimated Quantity	Cost	Estimated Quantity	Cost
1	Mobilization, Bonds, Insurance	\$100,000 /	0.4	\$40,000	1	\$100,000	0.7	\$70,000
2	Dust Control	\$5,000 /	1	\$5,000	2	\$10,000	2	\$10,000
3	Worker Protection	\$5,000 /	1	\$5,000	2	\$10,000	2	\$10,000
4	Traffic Control	\$10,000 /	1	\$10,000	2	\$20,000	1	\$10,000
5	Clearing & Grubbing	\$60,000 /	0.2	\$12,000	2	\$120,000	1	\$60,000
6	SWPPP Operations	\$10,000 /	0.2	\$2,000	1	\$10,000	0.2	\$2,000
7	6 inch gravity sewer	\$70 /	1,180	\$82,600	2,800	\$196,000	1,800	\$126,000
8	8 inch gravity sewer	\$80 /	0	\$0	1,600	\$128,000	0	\$0
9	12 inch gravity sewer	\$90 /	0	\$0	1,500	\$135,000	0	\$0
10	RR Crossing	\$350 /	0	\$0	300	\$105,000	0	\$0
11	6 inch force main	\$70 /	0	\$0	4,300	\$301,000	0	\$0
12	Manholes	\$4,000 /	5	\$20,000	20	\$80,000	6	\$24,000
13	Compaction	\$200 /	10	\$2,000	30	\$6,000	15	\$3,000
14	Pavement	\$70 /	1,180	\$82,600	8,600	\$602,000	1,800	\$126,000
15	Property Acquisition	\$10,000 /	1.0	\$10,000	0	\$0	0	\$0
16	Lift Station Grading	\$30,000 /	1.0	\$30,000	0	\$0	0	\$0
	Demolish Lift Station	\$30,000 /	1.0	\$30,000	0	\$0	0	\$0
	Site							
17	Duplex Lift Station	\$150,000 /	1	\$150,000	0	\$0	0	\$0
18	Lift Station Electrical	\$50,000 /	1	\$50,000	0	\$0	0	\$0
19	Generator	\$50,000 /	1	\$50,000	0	\$0	0	\$0
20	Lift Station Fencing	\$6,000 /	1	\$6,000	0	\$0	0	\$0
21	Lift Station surfacing	\$10,000 /	1	\$10,000	0	\$0	0	\$0
22	Triplex Influent Pump Station	\$250,000 /			1	\$250,000		\$0
23	WWTP Demolition	\$150,000 /	0	\$0	1	\$150,000	0	\$0
24	Bypass of flow	\$50,000 /	0	\$0	1	\$50,000	0	\$0
25	Headworks amd Screen and Installation	\$250,000 /	0	\$0	1	\$250,000	0	\$0
26	Flow meter	\$15,000	0	\$0	1	\$15,000	0	\$0
27	Grading	\$100,000 /	0	\$0	1	\$100,000	1	\$100,000
28	Pond Construction	\$200,000 /	0	\$0	1	\$200,000	1	\$200,000
29	Biological Equipment Package	\$300,000 /	0	\$0	1	\$300,000	1	\$300,000
30	Clarifier Construction	\$250,000 /	0	\$0	1	\$250,000	1	\$250,000
31	Handrailing	\$25,000 /	0	\$0	1	\$25,000	1	\$25,000
32	Yard Piping	\$50,000 /	0.00	\$0	1.00	\$50,000	1.00	\$50,000
33	Site Work/Fencing	\$100,000 /	0.00	\$0	0.90	\$89,532	0.00	\$0
34	Blower Building	\$100 /	0	\$0	1,500	\$150,000	0	\$0
35	Office/Lab	\$150 /	0	\$0	1,500	\$225,000	0	\$0
36	Sludge Drying Beds	\$200,000 /	0	\$0	1	\$200,000	0.5	\$100,000
37	Coagulant Dosing and mixing	\$0 /	0	\$0	0	\$0	0	\$0
38	Groundwater Monitoring Wells	\$25,000	0	\$0	3	\$75,000	0	\$0
39	Effluent Pump Station	\$200,000 /	0	\$0	0	\$0	0	\$0
	Demolish existing WWTP, rehabilitate ponds	\$100,000 /			1	\$100,000		
	Effluent Pond Embankments	\$200,000 /			1	\$200,000		
	Effluent Pond Embankment Surfacing	\$200,000 /			1	\$200,000		
40	Effluent Piping	\$30 /	0	\$0	600	\$18,000	600	\$18,000
41	Electrical Facilities and Controls	\$300,000 /	0	\$0	1	\$300,000	0.5	\$150,000
42	Standby Power	\$150,000 /	0	\$0	1	\$150,000	0	\$0
	Subtotal			\$597,200		\$5,170,532		\$1,634,000
	Engineering	8%		\$47,776	1	\$413,643		\$130,720
	Regulatory Permitting	\$25,000 /	0	\$0	1	\$25,000	1	\$25,000
	Environmental Admin/legal	\$40,000 /	0	\$0	1	\$40,000	1	\$40,000
	Survey	2%		\$11,944		\$103,411		\$32,680
	Advertising	2%		\$11,944		\$103,411		\$32,680
	CM	\$10,000 /	1	\$10,000	1	\$10,000	1	\$10,000
	Permitting	5%		\$29,860		\$258,527		\$81,700
	20%	\$10,000 /	1	\$10,000	1	\$10,000	1	\$10,000
	Contingency Total			\$119,400		\$1,034,100		\$326,800
				\$838,000		\$7,169,000		\$2,324,000

Assumptions:

The cost of sewer service connections is not included.

The RWQCB requirements for expansion are not known.

The effluent disposal limit for the WWTP property is approximately 0.17 mgd.

This total is estimated to be very near the total required capacity for the three scenarios.

Additional capacity for expansion is not included at this time.

Additional property acquisition may be required.

Standby Power will be required at the new lift station in town.

A replacement lift station will be required in the WWTP.

Replacement Standby Power will be required at the WWTP.

The new treatment process will be Biolac or BioWorks

The new treatment process would be comprised of two trains, each 0.1 mgd capacity.

Operational costs for the sanitary system will increase.

The final alignment of pipelines is not known, therefore the impact to pavement is not known.

APPENDIX A

TENTATIVE SUBDIVISION MAP

Being a portion of Parcel 1 of Parcel Map No. 174, Rec. in Bk. 2 of Parcel Maps at Page 74, T.C.R.. Situated in a portion of the N 1/2 of the N 1/2 of Section 16, Township 17 South, Range 23 East, Mount Diablo Base & Meridian, in the County of Tulare, State of California.

NOVEMBER 2013

OWNERS: 41616 Rd. 64
Dinuba, CA 93618

DAVID R. & DEBORAH J. JOHNSTON
JAMES L. & RHONDA P. MERLO
co-trustees of the James L. Merlo and Rhonda P. Merlo family trust under declaration of living trust dated April 27, 2011 (a revocable living trust)

HAROLD D. & KATHERINE M. NEWTON
trustees of the Harold D. Newton and Katherine M. Newton trust dated September 2011

WAWONA PACKING CO., LLC, a limited liability company

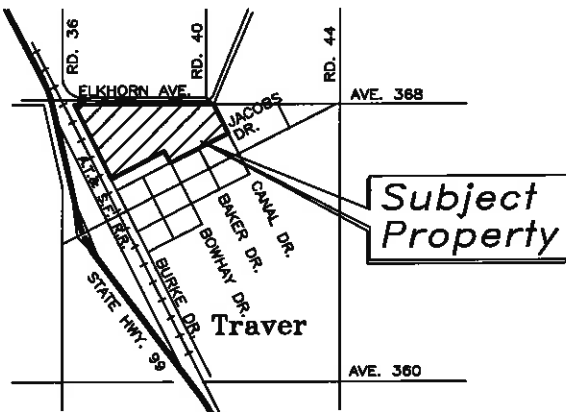
DEVELOPER: Self Help Enterprises,
A California Nonprofit Corporation
8445 W. Elwin Court
Visalia, California, 93291

SURVEYOR: FORESTER, WEBER & ASSOCIATES
1620 W. Mineral King Ave., Suite B
Visalia, California 93291
(209) 732-0102

NOTES:

ALL STREET GRADES SHALL BE LESS THAN 6%.
NO PROPOSED PUBLIC AREAS OTHER THAN STREET.
THE LAND IS VACANT.
NATURAL SLOPE OF GROUND IS LESS THAN 5%.
PROPERTY LIES IN FLOOD ZONE "A" WHICH INDICATES AREAS OF 100-YEAR FLOOD; BASE FLOOD ELEVATIONS AND FLOOD HAZARD FACTORS NOT DETERMINED.
PANEL NO. 08107C0605E

WATER BY: PRIVATE WATER SYSTEM SERVICES DISTRICT
SEWAGE BY: TULARE COUNTY SEWER SERVICES DISTRICT
SOLID WASTE: PRIVATE DISPOSAL CO.
8,100 SQ.FT. MIN. LOTS
APN: 040-010-024
ZONE: R-1, SINGLE FAMILY RESIDENTIAL
LOT A IS FOR DRAINAGE PURPOSES ONLY, AND IS NOT A BUILDING SITE FOR THIS SUBDIVISION.
AREA OF SUBDIVISION INCLUDING DRAINAGE BASIN AND STREET ABANDONMENT IS 2.29 ACRES.
NOT PART OF A LAND CONSERVATION CONTRACT.

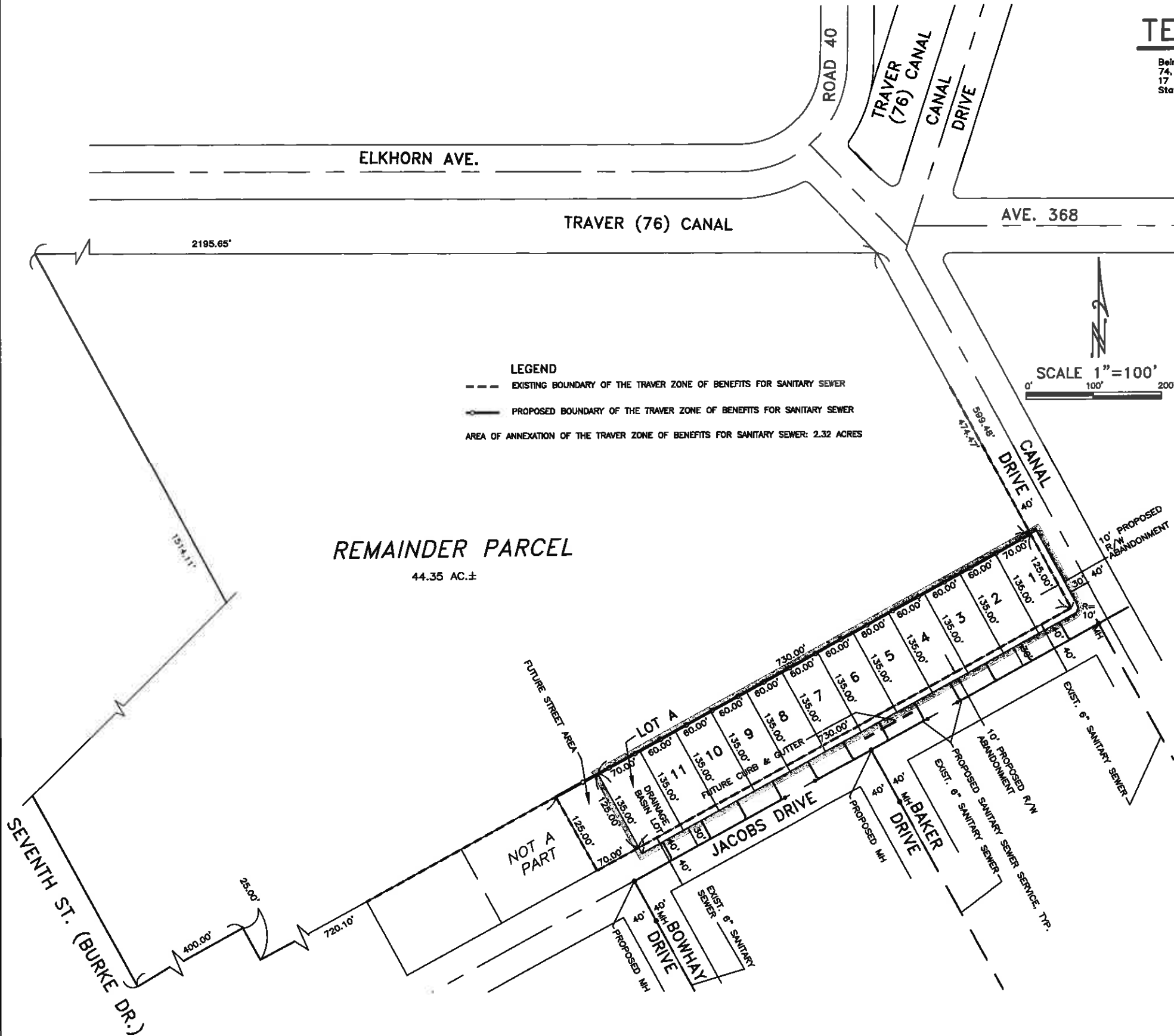


Vicinity Map

NO SCALE

One Sheet Only

186-13



APPENDIX B

APPENDIX C



FKC SCREW PRESS

About FKC

Screw Press

Introduction

About FKC

Screw Press

Applications

Rotary Screen

Pressure Press

(RST) Introduction

Flocculation Tanks

On-site Pilot

Testing Press

Applications

Employment

Sales Literature

In-stock and

Rotary Screen

Used Equipment

Contact Us

Flocculation
Tanks

On-Site Testing

Lab Testing

Employment

Sales Literature

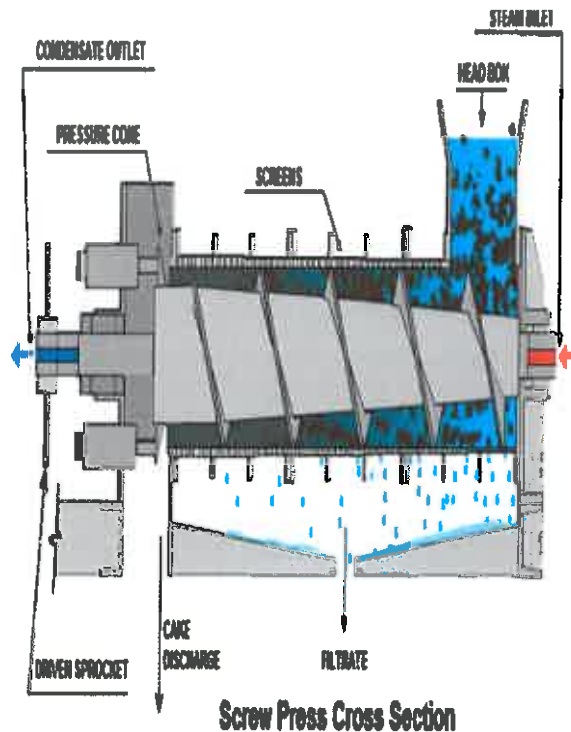
In-stock and
Used Equipment

Contact Us

Screw Press Introduction

An FKC screw press can be used in an extremely wide variety of liquid-solid separation, or dewatering applications. An FKC screw press can be used in the same applications where belt presses, centrifuges, and filter presses have traditionally been used, as well as in more traditional screw press applications such as those in the pulp & paper industry. FKC custom designs and manufactures screw presses from 100 mm (4") to 1500 mm (59") in diameter, with wetted lengths up to 9 meters (30').

As shown to the right, the screw press is a very simple, slow moving mechanical device. Dewatering is continuous and is accomplished by gravity drainage at the inlet end of the screw and then by reducing the volume as the material being dewatered is conveyed from the inlet to the discharge end of the screw press. Proper screw design is critical, as different materials require different screw speeds, screw configurations, and screens in order to dewater to a high outlet consistency while maintaining an excellent capture rate.





FKC SCREW PRESS

[About FKC](#)
[Screw Press](#)
[Introduction](#)
[About FKC](#)
[Screw Press](#)
[Applications](#)
[Rotary Screen](#)
[Thickener Press](#)
[\(RST\)roduction](#)
[Flocculation Tanks](#)
[On-site Pilot](#)
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[Press](#)
[Applications](#)
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Biosolids Dewatering

FKC screw presses provide a unique, cost effective solution for dewatering of municipal and industrial biosolids. While relatively new to this market in North America, FKC screw presses have been dewatering various non-fibrous sludges and other materials for over 20 years in a wide variety of industries. [Click Here](#) to Download the Biosolids Flyer

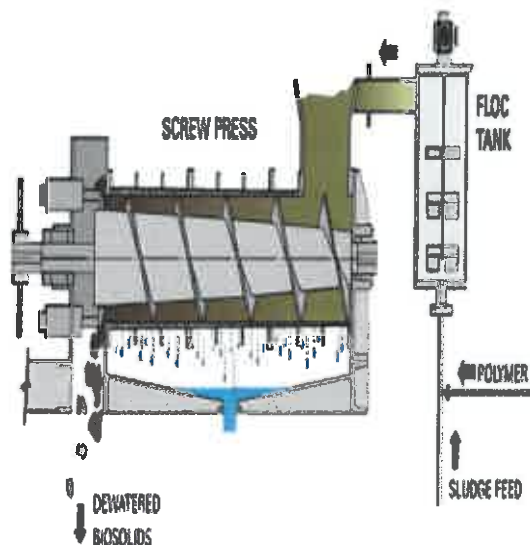
Applications:

- Municipal WWTP
- Sludges of All Types (Aerobically Digested, Anaerobically Digested, Raw)
- Primary, Secondary, or Mixed Sludges
- Industrial Biosolids
- [Septage & Grease Trap](#)
- Sludge Thickening [RST](#) & [HC-RST](#)

Features of the FKC Biosolids Dewatering Screw Press:

- Heavy Duty Construction
- High Outlet Consistency
- Slow Speed
- Few Moving Parts
- Very Low Maintenance
- [Upgradeable to Produce Class A Biosolids](#)
- Stainless Steel Wetted parts
- Low Power Consumption
- Fully Enclosed covers
- Simple, Unattended Operation
- Automated Washdown
- High Quality Construction

[Click Here for Pictures](#)



Typical Sludge Dewatering Process Flow Diagram

APPENDIX D

MONTHLY USER CHARGE SUMMARY

SINGLE FAMILY DWELLING

F. Y. 2012-13 UPDATE

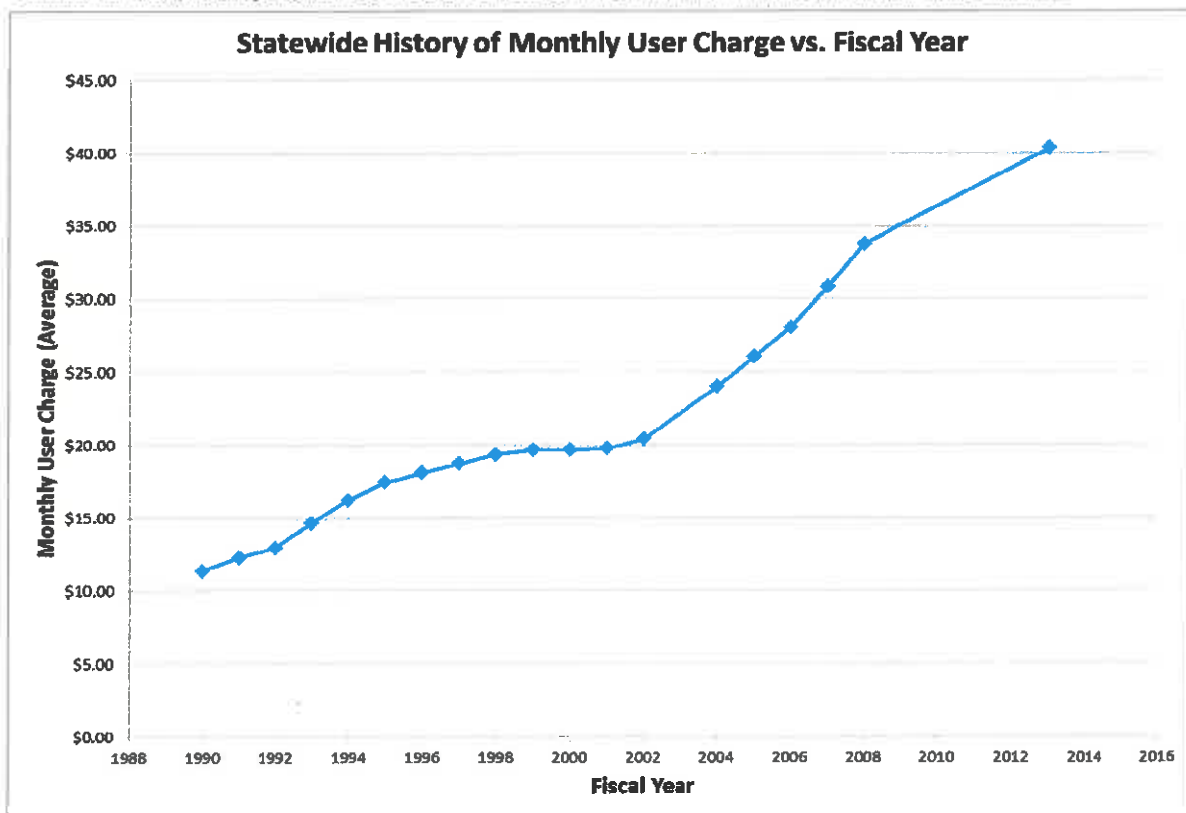
Prepared by: S. W. R. C. B., Division of Financial Assistance

Note: User Charge Summary calculations exclude data from agencies reporting variable user charge.

STATEWIDE HISTORY

	User Areas Surveyed	User Areas Reporting	Reporting User Charge	User Charge Data Prior Year ¹	Lowest (per month)	Highest (per month)	Average (per month)	Median (per month)
State Fiscal Year 1989-1990	677	550	400	-	\$1.75	\$51.00	\$11.44	\$10.00
State Fiscal Year 1990-1991	677	540	425	-	\$0.00	\$73.95	\$12.36	\$10.70
State Fiscal Year 1991-1992	677	493	374	-	\$0.00	\$99.00	\$13.00	\$11.60
State Fiscal Year 1992-1993	677	554	440	-	\$1.21	\$99.00	\$14.73	\$12.85
State Fiscal Year 1993-1994	819	722	597	-	\$0.00	\$84.87	\$16.30	\$14.00
State Fiscal Year 1994-1995	819	723	603	-	\$3.17	\$88.75	\$17.51	\$15.00
State Fiscal Year 1995-1996	819	711	593	-	\$4.25	\$88.75	\$18.15	\$15.37
State Fiscal Year 1996-1997	821	755	633	-	\$2.71	\$88.75	\$18.80	\$16.00
State Fiscal Year 1997-1998	827	750	625	-	\$4.25	\$88.75	\$19.43	\$16.50
State Fiscal Year 1998-1999	827	742	616	-	\$4.25	\$88.75	\$19.72	\$16.51
State Fiscal Year 1999-2000	908	820	718	-	\$0.00	\$91.38	\$19.71	\$16.67
State Fiscal Year 2000-2001	908	783	723	-	\$0.00	\$145.50	\$19.82	\$16.80
State Fiscal Year 2001-2002	906	602	552	142	\$4.25	\$118.88	\$20.46	\$17.43
State Fiscal Year 2002-2003	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2003-2004	902	759	584	52	\$4.25	\$169.92	\$24.03	\$20.22
State Fiscal Year 2004-2005	904	738	608	93	\$0.00	\$248.58	\$26.08	\$22.04
State Fiscal Year 2005-2006	898	750	626	91	\$0.00	\$231.92	\$28.09	\$23.87
State Fiscal Year 2006-2007	916	753	625	73	\$0.00	\$231.92	\$30.86	\$25.00
State Fiscal Year 2007-2008	920	784	651	65	\$0.00	\$231.92	\$33.82	\$26.83
State Fiscal Year 2008-2009	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2009-2010	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2010-2011	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2011-2012	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2012-2013	759	422	370	-	\$0.00	\$368.33	\$40.30	\$33.83

¹Fee Data Prior Year: Represents agencies who have not renewed their wastewater charges and therefore the most current wastewater charges were used.



NOTE: User Charge Summary calculations exclude data from agencies reporting variable user charge.

MONTHLY USER CHARGE GROUPED BY POPULATION SERVED

Criteria	Reporting Fixed Charge	Lowest (per month)	Highest (per month)	Average (per month)	Median (per month)
ALL FACILITIES RETURNING FORM²	365	\$0.00	\$368.33	\$35.81	\$29.44
POPULATION UNDER 1,000	58	\$0.00	\$368.33	\$62.23	\$47.00
POPULATION 1,000 TO 9,999	107	\$6.50	\$131.20	\$45.45	\$38.27
POPULATION 10,000 TO 49,999	97	\$1.92	\$90.00	\$35.11	\$33.54
POPULATION 50,000 TO 99,999	44	\$1.86	\$62.67	\$26.56	\$24.38
POPULATION 100,000 TO 499,999	45	\$2.41	\$108.00	\$27.38	\$25.33
POPULATION 500,000 AND OVER	14	\$3.71	\$33.83	\$18.14	\$14.66
RATES BASED ON BOD/SS LOADING³	162	\$3.10	\$151.45	\$39.83	\$27.06
POPULATION UNDER 1,000	7	\$9.67	\$151.45	\$73.92	\$51.58
POPULATION 1,000 TO 9,999	25	\$6.50	\$131.20	\$57.43	\$52.01
POPULATION 10,000 TO 49,999	55	\$4.77	\$73.51	\$30.01	\$22.69
POPULATION 50,000 TO 99,999	29	\$3.10	\$62.67	\$30.98	\$29.62
POPULATION 100,000 TO 499,999	33	\$10.08	\$108.00	\$27.41	\$24.50
POPULATION 500,000 AND OVER	13	\$11.17	\$33.83	\$19.25	\$16.28
RATES NOT BASED ON BOD/SS LOADING³	203	\$1.86	\$368.33	\$30.44	\$24.75
POPULATION UNDER 1,000	51	\$6.00	\$368.33	\$61.85	\$44.25
POPULATION 1,000 TO 9,999	81	\$6.96	\$114.00	\$41.76	\$36.90
POPULATION 10,000 TO 49,999	43	\$4.77	\$73.51	\$30.01	\$22.69
POPULATION 50,000 TO 99,999	15	\$1.86	\$42.24	\$18.01	\$15.79
POPULATION 100,000 TO 499,999	12	\$2.41	\$67.00	\$27.31	\$26.81
POPULATION 500,000 AND OVER	1	\$3.71	\$3.71	\$3.71	\$3.71

²Excludes agencies not reporting fixed charge and/or population

³Excludes agencies not reporting fixed charge, loading, and/or population

NOTE: User Charge Summary calculations exclude data from agencies reporting variable user charge.

MONTHLY USER CHARGE GROUPED BY LEVEL OF TREATMENT

Criteria	Reporting Fixed Charge	Lowest (per month)	Highest (per month)	Average (per month)	Median (per month)
ALL FACILITIES RETURNING FORM⁴	237	\$0.00	\$459.00	\$48.67	\$39.49
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	36	\$0.00	\$145.00	\$32.15	\$26.79
PRIMARY WITH DISINFECTION	9	\$12.83	\$459.00	\$90.26	\$44.16
SECONDARY TREATMENT	33	\$8.50	\$100.00	\$36.71	\$26.87
SECONDARY WITH DISINFECTION	42	\$9.00	\$162.50	\$45.91	\$39.83
SECONDARY WITH NUTRIENT REMOVAL	20	\$15.58	\$203.75	\$54.40	\$40.96
TERTIARY TREATMENT	53	\$6.83	\$144.92	\$33.62	\$31.90
TERTIARY WITH NUTRIENT REMOVAL	44	\$3.99	\$183.33	\$47.62	\$39.49
RATES BASED ON BOD/SS LOADING⁵	117	\$3.99	\$140.17	\$37.11	\$33.66
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	4	\$21.15	\$49.42	\$34.47	\$33.66
PRIMARY WITH DISINFECTION	2	\$27.70	\$51.58	\$39.64	\$39.64
SECONDARY TREATMENT	10	\$12.92	\$79.08	\$32.36	\$27.06
SECONDARY WITH DISINFECTION	25	\$9.00	\$140.17	\$43.53	\$41.26
SECONDARY WITH NUTRIENT REMOVAL	9	\$22.90	\$99.09	\$40.78	\$33.21
TERTIARY TREATMENT	36	\$9.67	\$100.92	\$29.40	\$25.75
TERTIARY WITH NUTRIENT REMOVAL	31	\$3.99	\$131.20	\$39.60	\$33.83
RATES NOT BASED ON BOD/SS LOADING⁵	120	\$6.83	\$459.00	\$57.06	\$39.35
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	32	\$9.00	\$145.00	\$31.86	\$25.98
PRIMARY WITH DISINFECTION	7	\$12.83	\$459.00	\$104.72	\$44.16
SECONDARY TREATMENT	23	\$8.50	\$100.00	\$38.60	\$24.24
SECONDARY WITH DISINFECTION	17	\$12.00	\$162.50	\$49.42	\$38.40
SECONDARY WITH NUTRIENT REMOVAL	11	\$15.58	\$203.75	\$65.55	\$58.09
TERTIARY TREATMENT	17	\$6.83	\$144.92	\$42.54	\$39.35
TERTIARY WITH NUTRIENT REMOVAL	13	\$9.31	\$183.33	\$66.74	\$47.27

⁴Excludes agencies not reporting fixed charge and/or level of treatment

⁵Excludes agencies not reporting fixed charge, loading, and/or level of treatment

NOTE: User Charge Summary calculations exclude data from agencies reporting variable user charge.

MONTHLY USER CHARGE GROUPED BY COUNTY

County	User Areas Surveyed	User Areas Reporting	Reporting Fixed Charge	Lowest (per month)	Highest (per month)	Average (per month)	Median (per month)
ALAMEDA	16	10	8	\$13.64	\$40.75	\$25.20	\$24.15
ALPINE	3	2	2	\$61.50	\$76.50	\$69.00	\$69.00
AMADOR	9	5	4	\$29.35	\$75.59	\$54.38	\$56.29
BUTTE	11	4	4	\$8.60	\$27.35	\$20.74	\$23.50
CALAVERAS	6	3	2	\$33.75	\$71.92	\$52.84	\$52.84
COLUSA	4	2	2	\$15.00	\$48.00	\$31.50	\$31.50
CONTRA COSTA	20	13	13	\$15.79	\$162.50	\$56.88	\$42.24
DEL NORTE	3	1	1	\$64.32	\$64.32	\$64.32	\$64.32
EL DORADO	3	0	0	-	-	-	-
FRESNO	25	15	13	\$15.68	\$47.00	\$32.39	\$35.00
GLENN	5	3	2	\$20.92	\$46.69	\$33.81	\$33.81
HUMBOLDT	19	9	7	\$12.83	\$51.58	\$40.52	\$47.00
IMPERIAL	12	4	4	\$31.45	\$49.32	\$41.10	\$41.81
INYO	5	3	3	\$8.50	\$27.58	\$17.03	\$15.00
KERN	29	17	17	\$10.00	\$368.33	\$40.35	\$18.22
KINGS	7	2	2	\$22.90	\$27.70	\$25.30	\$25.30
LAKE	4	2	2	\$26.00	\$50.18	\$38.09	\$38.09
LASSEN	5	5	5	\$15.58	\$37.01	\$26.52	\$25.00
LOS ANGELES	91	42	37	\$1.86	\$108.00	\$20.00	\$12.50
MADERA	3	1	1	\$20.80	\$20.80	\$20.80	\$20.80
MARIN	20	13	11	\$20.50	\$84.42	\$51.95	\$53.50
MARIPOSA	2	1	1	\$21.00	\$21.00	\$21.00	\$21.00
MENDOCINO	15	7	7	\$37.75	\$151.45	\$70.50	\$60.42
MERCED	16	8	8	\$22.69	\$85.00	\$37.50	\$26.60
MODOC	4	1	1	\$38.00	\$38.00	\$38.00	\$38.00
MONO	4	1	1	\$24.24	\$24.24	\$24.24	\$24.24
MONTEREY	14	10	9	\$6.96	\$50.00	\$27.58	\$27.00
NAPA	9	5	4	\$37.34	\$95.75	\$57.73	\$48.93
NEVADA	10	9	9	\$12.75	\$203.75	\$106.91	\$98.75
ORANGE	29	16	11	\$2.75	\$67.00	\$20.52	\$17.20
PLACER	14	13	13	\$6.83	\$114.00	\$51.14	\$38.64
PLUMAS	12	3	3	\$34.22	\$43.80	\$38.69	\$38.05
RIVERSIDE	28	17	15	\$4.07	\$44.71	\$25.22	\$24.50
SACRAMENTO	7	5	5	\$0.00	\$24.00	\$15.42	\$17.10
SAN BENITO	4	2	1	\$99.09	\$99.09	\$99.09	\$99.09
SAN BERNARDINO	32	17	14	\$13.03	\$71.90	\$34.20	\$28.78
SAN DIEGO	38	19	17	\$1.92	\$145.00	\$47.25	\$47.75
SAN FRANCISCO	1	1	0	-	-	-	-
SAN JOAQUIN	11	5	4	\$28.74	\$100.00	\$59.64	\$54.90
SAN LUIS OBISPO	20	15	11	\$14.86	\$99.55	\$42.63	\$41.35
SAN MATEO	20	12	10	\$2.41	\$85.42	\$49.22	\$53.29
SANTA BARBARA	21	11	10	\$14.00	\$90.00	\$44.31	\$47.96
SANTA CLARA	17	7	6	\$24.25	\$56.37	\$35.82	\$33.58
SANTA CRUZ	5	1	1	\$23.06	\$23.06	\$23.06	\$23.06
SHASTA	7	3	3	\$20.40	\$52.01	\$33.86	\$29.17
SIERRA	1	1	0	-	-	-	-
SISKIYOU	17	9	7	\$7.39	\$42.00	\$29.00	\$36.90
SOLANO	6	3	3	\$26.65	\$45.88	\$37.93	\$41.26
SONOMA	12	15	12	\$19.63	\$140.17	\$80.06	\$73.88
STANISLAUS	16	14	13	\$21.15	\$81.53	\$39.23	\$36.73
SUTTER	4	2	2	\$33.60	\$68.80	\$51.20	\$51.20
TEHAMA	6	2	1	\$34.20	\$34.20	\$34.20	\$34.20
TRINITY	1	1	1	\$22.00	\$22.00	\$22.00	\$22.00
TULARE	25	15	14	\$9.00	\$59.25	\$31.34	\$31.70
TUOLUMNE	5	4	2	\$52.75	\$53.10	\$52.93	\$52.93
VENTURA	15	7	7	\$3.99	\$86.99	\$35.94	\$28.85
YOLO	7	2	2	\$9.00	\$38.30	\$23.65	\$23.65
YUBA	4	2	2	\$36.83	\$46.28	\$41.56	\$41.56
STATEWIDE	759	422	370	\$0.00	\$368.33	\$41.17	\$36.81

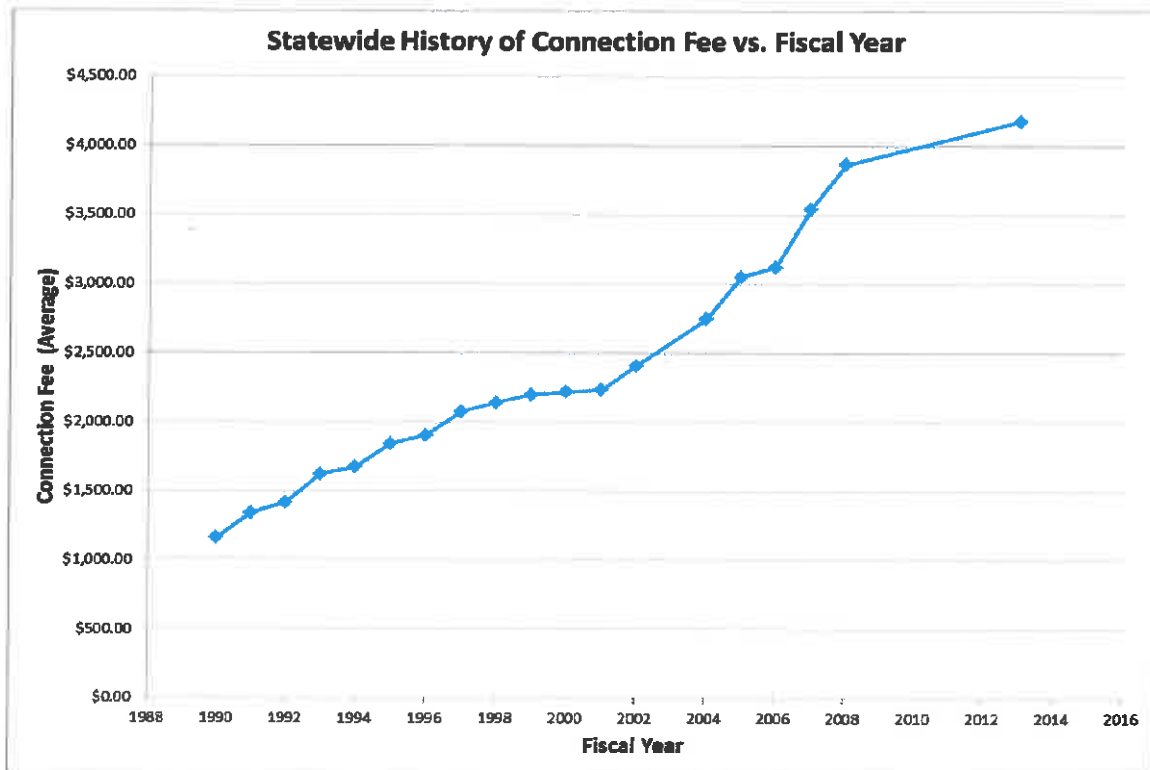
CONNECTION FEE SUMMARY
SINGLE FAMILY DWELLING
F. Y. 2012-13 UPDATE

Prepared by: S. W. R. C. B., Division of Financial Assistance

STATEWIDE HISTORY

	User Areas Surveyed	User Areas Reporting	Reporting Connection Fee	Connection Fee Data Prior Year ¹	Lowest	Highest	Average	Median
State Fiscal Year 1989-1990	677	550	474	-	\$0.00	\$6,740.00	\$1,167.00	\$900.00
State Fiscal Year 1990-1991	677	540	494	-	\$0.00	\$6,740.00	\$1,348.00	\$1,055.00
State Fiscal Year 1991-1992	677	493	418	-	\$0.00	\$6,818.00	\$1,425.00	\$1,200.00
State Fiscal Year 1992-1993	677	554	466	-	\$0.00	\$14,223.00	\$1,629.00	\$1,305.00
State Fiscal Year 1993-1994	819	722	612	-	\$0.00	\$10,130.00	\$1,680.00	\$1,454.00
State Fiscal Year 1994-1995	819	723	625	-	\$0.00	\$20,000.00	\$1,849.00	\$1,536.00
State Fiscal Year 1995-1996	819	711	636	-	\$0.00	\$12,000.00	\$1,910.00	\$1,600.00
State Fiscal Year 1996-1997	821	755	642	-	\$0.00	\$13,184.00	\$2,081.00	\$1,745.00
State Fiscal Year 1997-1998	827	750	641	-	\$0.00	\$13,981.00	\$2,147.00	\$1,742.00
State Fiscal Year 1998-1999	827	742	632	-	\$0.00	\$16,000.00	\$2,207.00	\$1,905.00
State Fiscal Year 1999-2000	908	820	695	-	\$0.00	\$18,000.00	\$2,225.00	\$1,777.00
State Fiscal Year 2000-2001	908	783	796	-	\$0.00	\$18,000.00	\$2,242.00	\$1,748.00
State Fiscal Year 2001-2002	906	602	541	194	\$0.00	\$18,000.00	\$2,415.00	\$1,982.00
State Fiscal Year 2002-2003	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2003-2004	902	759	658	58	\$0.00	\$20,300.00	\$2,752.00	\$2,111.00
State Fiscal Year 2004-2005	904	738	662	77	\$0.00	\$20,825.00	\$3,057.00	\$2,400.00
State Fiscal Year 2005-2006	898	750	696	101	\$0.00	\$21,469.00	\$3,129.00	\$2,500.00
State Fiscal Year 2006-2007	916	753	679	71	\$0.00	\$22,305.00	\$3,547.00	\$2,800.00
State Fiscal Year 2007-2008	920	785	698	71	\$0.00	\$22,305.00	\$3,870.00	\$3,100.00
State Fiscal Year 2008-2009	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2009-2010	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2010-2011	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2011-2012	No Survey	-	-	-	-	-	-	-
State Fiscal Year 2012-2013	759	422	369	-	\$0.00	\$38,000.00	\$4,177.60	\$3,417.00

¹Fee Data Prior Year: Represents agencies who have not renewed their wastewater charges and therefore the most current wastewater charges were used.



CONNECTION FEES GROUPED BY POPULATION SERVED

Criteria	Reporting Connection Fee ²	Lowest	Highest	Average	Median
ALL FACILITIES RETURNING FORM²	366	\$0.00	\$38,000.00	\$4,082.52	\$3,225.00
POPULATION UNDER 1,000	58	\$0.00	\$13,409.00	\$3,539.74	\$3,020.00
POPULATION 1,000 TO 9,999	109	\$0.00	\$16,023.82	\$4,045.64	\$3,430.00
POPULATION 10,000 TO 49,999	94	\$0.00	\$38,000.00	\$4,530.33	\$3,510.00
POPULATION 50,000 TO 99,999	45	\$0.00	\$15,200.00	\$3,273.60	\$2,680.00
POPULATION 100,000 TO 499,999	45	\$0.00	\$21,584.00	\$5,665.69	\$5,152.53
POPULATION 500,000 AND OVER	15	\$9.31	\$10,000.00	\$3,440.10	\$2,175.00
CONNECTION FEE INCLUDES DEBT SERVICE³	153	\$0.00	\$38,000.00	\$3,944.16	\$3,313.25
POPULATION UNDER 1,000	7	\$0.00	\$13,409.00	\$3,601.37	\$3,204.50
POPULATION 1,000 TO 9,999	22	\$0.00	\$16,023.82	\$4,131.73	\$3,422.00
POPULATION 10,000 TO 49,999	50	\$0.00	\$38,000.00	\$4,495.43	\$3,500.00
POPULATION 50,000 TO 99,999	31	\$0.00	\$7,498.48	\$2,625.61	\$2,660.00
POPULATION 100,000 TO 499,999	30	\$0.00	\$14,242.00	\$5,687.61	\$5,448.00
POPULATION 500,000 AND OVER	13	\$9.31	\$7,860.00	\$3,123.20	\$2,175.00
CONNECTION FEE DOES NOT INCLUDE DEBT SERVICE³	211	\$0.00	\$21,584.00	\$5,515.05	\$3,986.68
POPULATION UNDER 1,000	49	\$0.00	\$10,264.00	\$3,357.97	\$2,520.00
POPULATION 1,000 TO 9,999	87	\$0.00	\$15,273.00	\$3,976.30	\$3,870.50
POPULATION 10,000 TO 49,999	43	\$0.00	\$17,809.00	\$4,823.81	\$3,690.00
POPULATION 50,000 TO 99,999	14	\$237.00	\$15,200.00	\$5,276.46	\$4,650.00
POPULATION 100,000 TO 499,999	16	\$0.00	\$21,584.00	\$5,655.73	\$4,102.86
POPULATION 500,000 AND OVER	2	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00

²Excludes agencies not reporting fixed charge and/or population

³Excludes agencies not reporting fixed charge, loading, and/or population

CONNECTION FEES GROUPED BY LEVEL OF TREATMENT

Criteria	Reporting Connection Fee	Lowest	Highest	Average	Median
ALL FACILITIES RETURNING FORM⁴	237	\$0.00	\$38,000.00	\$4,051.14	\$3,259.00
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	38	\$0.00	\$16,023.82	\$4,569.16	\$3,259.00
PRIMARY WITH DISINFECTION	8	\$535.00	\$5,000.00	\$2,801.43	\$3,191.50
SECONDARY TREATMENT	30	\$0.00	\$16,955.05	\$3,546.98	\$3,605.00
SECONDARY WITH DISINFECTION	44	\$500.00	\$15,520.00	\$4,803.58	\$4,450.00
SECONDARY WITH NUTRIENT REMOVAL	25	\$0.00	\$38,000.00	\$5,230.78	\$3,389.00
TERTIARY TREATMENT	48	\$0.00	\$14,242.00	\$3,512.75	\$2,912.50
TERTIARY WITH NUTRIENT REMOVAL	44	\$21.58	\$21,584.00	\$3,893.27	\$3,000.00
CONNECTION FEE INCLUDES DEBT SERVICE⁵	175	\$0.00	\$38,000.00	\$4,141.65	\$3,882.00
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	25	\$0.00	\$16,023.82	\$4,945.23	\$3,882.00
PRIMARY WITH DISINFECTION	7	\$535.00	\$5,000.00	\$2,974.00	\$3,383.00
SECONDARY TREATMENT	13	\$9.31	\$13,409.00	\$3,295.66	\$4,055.00
SECONDARY WITH DISINFECTION	31	\$500.00	\$15,520.00	\$4,702.11	\$4,400.00
SECONDARY WITH NUTRIENT REMOVAL	18	\$0.00	\$38,000.00	\$6,030.14	\$3,920.00
TERTIARY TREATMENT	43	\$0.00	\$14,242.00	\$3,535.86	\$3,039.00
TERTIARY WITH NUTRIENT REMOVAL	38	\$21.58	\$9,391.00	\$3,508.58	\$2,957.50
CONNECTION FEE DOES NOT INCLUDE DEBT SERVICE⁵	62	\$0.00	\$21,584.00	\$3,863.29	\$2,940.00
SEPTIC TANK(S)	0	N/A	N/A	N/A	N/A
PRIMARY TREATMENT	13	\$63.00	\$15,273.00	\$3,845.93	\$2,940.00
PRIMARY WITH DISINFECTION	1	\$1,593.45	\$1,593.45	\$1,593.45	\$1,593.45
SECONDARY TREATMENT	17	\$0.00	\$16,955.05	\$3,739.16	\$3,252.00
SECONDARY WITH DISINFECTION	13	\$500.00	\$10,264.00	\$5,045.54	\$6,500.00
SECONDARY WITH NUTRIENT REMOVAL	7	\$0.00	\$8,057.00	\$3,175.29	\$1,798.00
TERTIARY TREATMENT	5	\$0.00	\$8,164.00	\$3,314.00	\$2,330.00
TERTIARY WITH NUTRIENT REMOVAL	6	\$500.00	\$21,584.00	\$6,329.67	\$4,225.00

⁴Excludes agencies not reporting fixed charge and/or level of treatment

⁵Excludes agencies not reporting fixed charge, loading, and/or level of treatment

CONNECTION FEES GROUPED BY COUNTY

County	User Areas Surveyed	User Areas Reporting	Reporting Connection Fee	Lowest	Highest	Average	Median
ALAMEDA	16	10	9	\$325.00	\$7,248.50	\$3,153.94	\$3,417.00
ALPINE	3	2	2	\$2,520.00	\$4,100.00	\$3,310.00	\$3,310.00
AMADOR	9	5	5	\$2,119.00	\$7,331.00	\$4,862.60	\$5,732.41
BUTTE	11	4	2	\$3,000.00	\$4,480.00	\$3,740.00	\$3,740.00
CALAVERAS	6	3	2	\$1,505.00	\$3,000.00	\$2,252.50	\$2,252.50
COLUSA	4	2	2	\$1,200.00	\$6,190.00	\$3,695.00	\$3,695.00
CONTRA COSTA	20	13	10	\$1,500.00	\$9,578.00	\$4,844.63	\$3,859.46
DEL NORTE	3	1	1	\$4,400.00	\$4,400.00	\$4,400.00	\$4,400.00
EL DORADO	3	0	0	-	-	-	-
FRESNO	25	15	14	\$0.00	\$7,498.48	\$3,011.20	\$3,916.00
GLENN	5	3	3	\$2,300.00	\$6,000.00	\$3,746.67	\$2,940.00
HUMBOLDT	19	9	9	\$846.72	\$38,000.00	\$7,651.46	\$3,732.00
IMPERIAL	12	4	3	\$535.00	\$4,196.00	\$2,696.00	\$3,367.00
INYO	5	3	3	\$1,200.00	\$15,273.00	\$6,657.00	\$3,498.00
KERN	29	17	14	\$0.00	\$7,300.00	\$2,399.48	\$1,820.00
KINGS	7	2	2	\$1,593.45	\$4,949.00	\$3,271.23	\$3,271.23
LAKE	4	2	2	\$0.00	\$15,520.00	\$7,760.00	\$7,760.00
LASSEN	5	5	4	\$460.28	\$16,023.82	\$5,036.28	\$1,830.50
LOS ANGELES	91	42	36	\$0.00	\$12,560.00	\$5,081.40	\$5,056.50
MADERA	3	1	1	\$4,124.00	\$4,124.00	\$4,124.00	\$4,124.00
MARIN	20	13	11	\$625.00	\$10,264.00	\$4,595.88	\$4,844.73
MARIPOSA	2	1	1	\$1,072.00	\$1,072.00	\$1,072.00	\$1,072.00
MENDOCINO	15	7	7	\$0.00	\$8,332.00	\$2,866.57	\$2,523.00
MERCED	16	8	6	\$237.00	\$7,600.00	\$2,889.79	\$2,427.50
MODOC	4	1	1	\$4,430.00	\$4,430.00	\$4,430.00	\$4,430.00
MONO	4	1	1	\$0.00	\$0.00	\$0.00	\$0.00
MONTEREY	14	10	10	\$0.00	\$14,242.00	\$5,197.27	\$5,931.00
NAPA	9	5	4	\$1.70	\$7,000.00	\$4,217.43	\$4,934.00
NEVADA	10	9	8	\$220.00	\$4,265.00	\$2,091.75	\$1,750.00
ORANGE	29	16	14	\$115.00	\$8,085.00	\$4,080.37	\$4,059.00
PLACER	14	13	13	\$115.07	\$8,164.00	\$3,018.43	\$2,850.00
PLUMAS	12	3	2	\$2,350.00	\$8,562.00	\$5,456.00	\$5,456.00
RIVERSIDE	28	17	13	\$0.00	\$7,800.00	\$4,641.26	\$4,500.00
SACRAMENTO	7	5	4	\$500.00	\$8,179.00	\$3,099.00	\$1,858.50
SAN BENITO	4	2	2	\$1,300.00	\$1,800.00	\$1,550.00	\$1,550.00
SAN BERNARDINO	32	17	15	\$125.00	\$17,809.00	\$5,362.00	\$4,310.00
SAN DIEGO	38	19	18	\$0.00	\$15,200.00	\$4,697.39	\$3,270.50
SAN FRANCISCO	1	1	0	-	-	-	-
SAN JOAQUIN	11	5	5	\$190.00	\$16,955.05	\$4,099.61	\$1,000.00
SAN LUIS OBISPO	20	15	12	\$500.00	\$15,840.00	\$5,465.46	\$4,496.00
SAN MATEO	20	12	10	\$108.00	\$10,586.92	\$5,463.69	\$4,530.00
SANTA BARBARA	21	11	10	\$32.50	\$9,146.00	\$4,220.35	\$4,248.50
SANTA CLARA	17	7	6	\$45.92	\$3,767.00	\$1,645.56	\$1,265.46
SANTA CRUZ	5	1	1	\$3,500.00	\$3,500.00	\$3,500.00	\$3,500.00
SHASTA	7	3	3	\$500.00	\$8,105.00	\$4,335.00	\$4,400.00
SIERRA	1	1	1	\$2,991.00	\$2,991.00	\$2,991.00	\$2,991.00
SISKIYOU	17	9	6	\$500.00	\$8,815.00	\$3,882.74	\$3,239.73
SOLANO	6	3	3	\$40.00	\$5,549.00	\$3,564.68	\$5,105.05
SONOMA	12	15	11	\$26.49	\$5,262.00	\$2,186.32	\$1,700.00
STANISLAUS	16	14	13	\$715.00	\$15,740.00	\$4,329.46	\$2,339.00
SUTTER	4	2	2	\$500.00	\$2,915.00	\$1,707.50	\$1,707.50
TEHAMA	6	2	2	\$1,500.00	\$2,330.00	\$1,915.00	\$1,915.00
TRINITY	1	1	1	\$10,352.00	\$10,352.00	\$10,352.00	\$10,352.00
TULARE	25	15	15	\$0.00	\$13,409.00	\$4,621.03	\$4,500.00
TUOLUMNE	5	4	4	\$1,304.27	\$8,050.80	\$4,210.02	\$3,742.50
VENTURA	15	7	6	\$2,500.00	\$21,584.00	\$6,745.67	\$4,195.00
YOLO	7	2	2	\$500.00	\$1,725.00	\$1,112.50	\$1,112.50
YUBA	4	2	2	\$4,374.00	\$6,148.00	\$5,261.00	\$5,261.00
STATEWIDE	759	422	369	\$0	\$38,000	\$3,858	\$3,500

Agencies (alpha sort)	Population	Water Use	Monthly User Fee	Connection Fee (per connection)	Source of Revenue: Sewer service charge (%)	BOD/SS Loading	Debt Ind.	Treatment Level	Service Provided				Current ADWF (mgd)	Current Design Flow (mgd)	CIP
									Collection	Interpret	Treatment	Disposal			
Adelanto Public Utility Authority	6,545	Flat Rate	\$61.08		90	No	Yes	Tertiary	x	x	x	x	2	4	No
Alhambra Sanitary District	11,502	Flat Rate	\$57.50	\$3,500.00	100	Yes	Yes	Tertiary	x	x	x	x	0.49	0.9	Yes
Alhambra Sanitary District	18,000	Variable	\$37.25	\$325.00	94	No	Yes	No Treatment Process	x				1.2		No
Alhambra Sanitary District	1,400	Flat Rate	\$33.33		77	Yes	No	No Treatment Process	x				0.13	0.2	No
Alto Sanitary District	100,000	Flat Rate	\$41.67	\$850.00	80	No	No	No Treatment Process	x				0.2		No
Amador City, City of	121	Flat Rate	\$52.00	\$5,732.41		No	No	No Treatment Process	x	x			0.012	0.039	No
Amador Regional Sanitation Authority	4,500	Flat Rate	\$6,130.60			No	No	No Treatment Process					0.286	0.5	No
American Canyon, City of	19,500	Flat Rate	\$45.70	\$5,910.00	90.02	Yes	Yes	Tertiary w/ Nutrient Removal	x		x	x	1.6	2.5	Yes
Anaheim, City of	341,000	Flat Rate	\$5.04	\$3,214.00	100	No	Yes	No Treatment Process	x						No
Anderson, City of	9,900	Variable	\$29.17	\$8,105.00	99	Yes	Yes	Tertiary	x		x	x	1.15	2	Yes
Angels, City of	3,836	Flat Rate	\$71.92	\$3,000.00		No	No	Tertiary w/ Nutrient Removal	x				0.35	0.8	No
Arbuckle Public Utility District	2,500	Flat Rate	\$15.00	\$6,180.00	95	No	No	Primary	x	x	x	x	0.241	0.5	No
Arcata, City of	18,800	Variable	\$8.44	\$3,490.00	95.7	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	1.162	2.3	Yes
Arrowhead Park County Water District	900	Flat Rate	\$29.00	\$4,310.00	75	No	Yes	No Treatment Process	x				0.085	0.75	No
Arvin, City of	19,000	Flat Rate	\$37.50	\$2,640.00	96	Yes	Yes	No Treatment Process	x		x		1.25	2	No
Auburn, City of	13,330	Flat Rate	\$73.51	\$350.00	93	No	Yes	Tertiary w/ Nutrient Removal	x		x	x	1.25	1.87	Yes
Bakersfield, City of	325,964	Flat Rate	\$17.06	\$7,260.00	83	Yes	Yes	Tertiary w/ Nutrient Removal	x		x	x	32	52	No
Banning, City of	28,800	Flat Rate	\$17.11		85	Yes	Yes	Secondary	x		x	x	2.1	3.6	No
Barstow, City of	73,400	Flat Rate	\$1,500.00	NA		Yes	No	Secondary	x	x			2.1	4.5	No
Bayshore Sanitary District	10,000	Variable	\$56.25	\$4,460.00	Unknown	Yes	No	No Treatment Process	x				2.9	5	No
Bear Valley Water District	4,000	Flat Rate	\$499.00	\$4,100.00	95.86	No	Yes	Primary w/ Disinfection	x		x	x	0.0057	0.05	No
Belmont, City of	26,147	Variable	\$67.25	\$8,179.00	99.8	No	Yes	No Treatment Process	x				1.7	11.8	No
Bentley, City of	28,000	Flat Rate	\$45.88	\$5,548.00	96	Yes	Yes	Secondary w/ Disinfection	x		x	x	2.3	4.5	Yes
Beverly Hills, City of	35,000	Flat Rate	\$43.69	\$10,519.00	98	Yes	Yes	No Treatment Process	x				6		Yes
Biggs, City of	1,700	Flat Rate	\$27.12		99	No	Yes	Secondary w/ Disinfection	x	x	x	x	0.375	0.5	No
Blaine, City of	3,879	Flat Rate	\$27.58	\$3,498.00	99	No	No	Primary	x		x	x	0.7	1.8	No
Blythe Regional Wastewater Reclamation Facilities	10	Flat Rate	\$43.09	\$4,090.00	99	No	Yes	No Treatment Process	x				1.1	2.4	No
Bozinger Bay Public Utility District	2,825	Variable	\$50.04	\$1,232.00	100	No	Yes	Tertiary	x		x	x	0.135	0.432	No
Boron Community Services District	2,000	Flat Rate	\$14.00		21	No	No	Primary	x		x		0.096	0.24	No
Boronda County Sanitation District	1,710	Flat Rate	\$23.17	\$8,221.00	100	No	Yes	No Treatment Process	x						No
Borrego Water District	800	Flat Rate	\$35.36	\$2,500.00	58	No	No	Secondary	x				0.08	0.25	No
Brea, City of	40,932	Flat Rate	\$7.68	\$8,016.00		No	No	No Treatment Process	x				0.55		Yes
Brentwood, City of	53,000	Variable	\$42.24	\$3,000.00	97	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	3.4	5	No
Brisbane, City of	4,282	Variable	\$53.50	\$4,600.00	99	Yes	Yes	No Treatment Process	x				0.101	8.7	No
Buellton, City of	4,878	Flat Rate	\$21.00	\$3,252.00	98	No	Yes	Secondary	x		x		0.475	0.8	No
Buena Park, City of	81,747	Variable	\$23.07		11	No	No	No Treatment Process	x				7.96	8.82	Yes
Burbank Public Works, City of	104,000	Flat Rate	\$22.34	\$21.58	98	Yes	Yes	Tertiary w/ Nutrient Removal	x		x		8.5	12.5	No
Burlingame, City of	28,000		\$9,200.00			No	No	Secondary w/ Nutrient Removal							No
Burney Water District	3,154	Variable	\$20.40	\$4,400.00	85	No	No	Secondary	x				0.44		No
Calaveras County Water District	12,000	Flat Rate	\$33.75	\$1,505.00	44	No	Yes	Tertiary	x		x	x	0.883	1.958	Yes
Calif Pines CSD	300	Flat Rate	\$38.00	\$4,430.00	75	No	No	Secondary	x				0.025	0.35	No
California City, City of	13,100	Variable	\$23.82	\$1,000.00	99	Yes	Yes	Tertiary	x		x	x	0.528	1.5	No
Camarillo Sanitary District	46,000	Flat Rate	\$38.68	\$4,390.00	97.7	Yes	Yes	Tertiary w/ Nutrient Removal	x	x			3.81	7.25	No
Carmel Area Wastewater District	11,000	Flat Rate	\$34.76	\$100.00	74.2	Yes	Yes	Tertiary	x		x	x	1.5	3	Yes
Caruthers Community Services District	2,487	Flat Rate	\$35.00	\$3,882.00	98	No	Yes	Primary	x		x	x	160	280	No
Casa De Amigos MHP	200		\$7,248.50		0	No	No	Primary	x		x	x	0.0192		No
Casper South Water District	180	Flat Rate	\$75.00	\$0.00	100	No	No	Primary	x				0.0032	8	No
Castro Valley Sanitary District	58,000	Flat Rate	\$21.87	\$965.00	99	Yes	No	No Treatment Process	x				3.74	5	Yes
Cayucos Sanitary District	3,400	Flat Rate	\$52.00	\$4,000.00	68	No	Yes	No Treatment Process	x				0.26	0.7	No
Central Marin Sanitation Agency	120,000	Flat Rate	\$6,444.00		91.9	No	Yes	Secondary w/ Disinfection			x	x	6.1	10	Yes
Ceres, City of	45,854	Flat Rate	\$49.42	\$7,155.00	95	Yes	Yes	Primary	x				2.63	4.2	No
Channel Islands Beach CSD	5,600	Flat Rate	\$41.52	\$4,000.00	96	No	Yes	No Treatment Process	x				0.38	1.8	No
Chester Public Utility District	2,144	Flat Rate	\$38.05	\$9,582.00	na	Yes	No	Secondary w/ Disinfection	x		x	x	0.75	0.75	No
Chowchilla, City of	11,127	Flat Rate	\$20.80	\$4,124.00	99	No	Yes	Secondary	x		x	x	0.91	1.8	No
Circle Oaks County Water District	500	Variable	\$52.15	\$3,958.00	30	No	No	Primary	x	x	x	x	0.03	0.072	No
Clovis, City of	98,611	Flat Rate	\$26.44	\$5,452.00	87.2	Yes	Yes	Tertiary w/ Nutrient Removal	x				7	12.1	Yes
Coachella Valley Water District	270,000	Flat Rate	\$24.50	\$0.00	79	Yes	No	Tertiary	x	x	x	x	17.5	33.5	Yes
Coalinga, City of	14,000	Flat Rate	\$15.88	\$0.00	0	No	Yes	Primary	x	x	x	x	0.9	1.35	No
Colton, City of	1,973	Flat Rate	\$96.46	\$5,300.00	50	No	Yes	Tertiary w/ Nutrient Removal	x		x	x	0.275	0.5	Yes
Colton, City of	52,940	Flat Rate	\$32.78	\$4,444.00	88	Yes	Yes	Secondary w/ Nutrient Removal	x				5.1	10.4	No
Concord, City of	133,000	Flat Rate	\$27.00	\$9,055.00	99	No	No	No Treatment Process	x	x			10.07	13.38	Yes
Consolidated Sewer Maintenance District	2,000,000	Flat Rate	\$3.71	\$10,000.00	100	No	No	No Treatment Process	x				200		No
Contra Costa County Public Works	118	Flat Rate	\$162.50	\$1,500.00	100	No	No	Secondary w/ Disinfection	x		x	x	0.009	0.014	No
Contra Costa CSA 71.2	750	Flat Rate	\$17.50		100	No	No	No Treatment Process	x				0.098	0.1	No
Corning, City of	7,883	Flat Rate	\$1,500.00		99	No	Yes	Secondary w/ Disinfection	x				0.7	1.4	No
Corona, City of	155,896	Variable	\$44.71	\$4,700.00	90.7	Yes	Yes	Tertiary w/ Nutrient Removal	x		x	x	14.3	15.5	Yes
Costa Mesa Sanitary District	116,700	Flat Rate	\$22.39	\$9.00	97	Yes	No	No Treatment Process	x				10.1	17.5	No
County of Kern CSA 71.1	400	Flat Rate	\$17.50	\$3,100.00	100	No	No	No Treatment Process	x				0.038	0.038	No
County of Kern CSA-11.4	2,400	Flat Rate	\$18.33	\$7,300.00	100	No	No	No Treatment Process	x				0.2	0.212	No
County of Kern CSA-71.3	2,250	Flat Rate	\$17.50	\$0.00	100	No	No	No Treatment Process	x	x			0.205		No
County Sanitation District No. 1 of Los Angeles County	588,108	Flat Rate	\$13.00	\$7,700.00	71	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 2 of Los Angeles County	686,409	Flat Rate	\$12.42	\$4,844.73	69	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 3 of Los Angeles County	503,422	Flat Rate	\$12.67	\$2,175.00	74	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 4 of Los Angeles County	36,281	Flat Rate	\$12.50		74	Yes	Yes	No Treatment Process	x				1.5		No
County Sanitation District No. 5 of Los Angeles County	736,189	Flat Rate	\$11.17	\$950.00	64	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 8 of Los Angeles County	138,524	Flat Rate	\$11.92	\$7,000.00	41	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 9 of Los Angeles County	2,428	Flat Rate	\$6.50	\$5,455.00	43	Yes	Yes	No Treatment Process					0.221		No
County Sanitation District No. 14 of Los Angeles County	194,088	Flat Rate	\$37.33	\$12,560.00	86	Yes	Yes	Tertiary	x	x	x	x	14.03	18	No
County Sanitation District No. 15 of Los Angeles County	580,064	Flat Rate	\$11.17	\$6,368.00	66	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 16 of Los Angeles County	264,392	Flat Rate	\$11.42	\$4,913.00	73	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 17 of Los Angeles County	56,419	Flat Rate	\$11.50	\$2,786.00	75	Yes	Yes	Tertiary	x				55.7	84.7	No
County Sanitation District No. 18 of Los Angeles County	337,157	Flat Rate	\$12.50		69	Yes	Yes	Tertiary	x	x	x	x	55.7	84.7	No
County Sanitation District No. 19 of Los Angeles County	90,897	Flat Rate	\$12.50	\$500.00	76	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	55.7	84.7	No
County Sanitation District No. 20 of Los Angeles County	126,155	Flat Rate	\$39.75	\$5,200.00	90	No	Yes	Tertiary	x		x		9.23	12	No
County Sanitation District No. 21 of Los Angeles County	405,673	Flat Rate	\$12.25	\$453.37	71	Yes	Yes	Tertiary	x						No
County Sanitation District No. 22 of Los Angeles County	327,555	Flat Rate	\$12.25	\$0.00	89	Yes	Yes	Tertiary	x		x	x			No
County Sanitation District No. 23 of Los Angeles County	112	Flat Rate	\$9.67	\$4,062.40	12	Yes	Yes	Tertiary	x		x	x			No
County Sanitation District No. 27 of Los Angeles County	2,269	Flat Rate	\$8,796.00		0	Yes	Yes	No Treatment Process	x				0.113		No
County Sanitation District No. 28 of Los Angeles County	11,298	Flat Rate	\$28.08	\$0.00	63	Yes	Yes	Tertiary	x		x	x			No
County Sanitation District No. 29 of Los Angeles County	11,072	Flat Rate	\$28.31	\$1,437.00	88	Yes	Yes	Tertiary	x		x	x			No
County Service Area No. 75 Chualar	1,190	Flat Rate	\$6.98	\$5,700.00	41	No	Yes	No Treatment Process	x		x	x			No
Covina, City of	49,600	Flat Rate	\$8.58	\$5,642.50	0.5	No	No	No Treatment Process					10.359	23.968	No
Crescent City, City of	15,000	Flat Rate	\$64.32	\$4,400.00	97	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	1.2	1.86	No
Crescenta Valley Water District	34,000	Flat Rate	\$28.75	\$7,174.00	99	Yes	No	No Treatment Process	x	x			1.587	4.5	No
Cresline Sanitation District	5,000	Flat Rate	\$71.90	\$7,000.00	88	No	No	Secondary w/ Nutrient Removal	x				0.5	1.4	No
Crockett Sanitary Department	3,094	Flat Rate	\$52.67	\$7,640.00	89.76	No	Yes	No Treatment Process	x				0.2547	0.3	No
CSA 28 Zone 173 - Dry Creek	3,200	Flat Rate	\$38.14	\$3,791.00	90	No	No	No Treatment Process	x				0.17		No
CSA 28 Zone 24 - Applegate	85	Flat Rate	\$82.00	\$1,000.00	98	No	No	No Treatment Process	x				0.01		No
CSA															

Agencies (alpha sort)	Population	Water Use	Monthly User Fee	Connection Fee (per connection)	Source of Revenue: Sewer service charge (%)	BOO/BS Loading	Debt Incl.	Treatment Level	Service Provided				Current ADWF (mgd)	Current Design Flow (mgd)	CIP
									Collection	Interceptor	Treatment	Disposal			
Davis WWTP, City of	86,000	Variable	\$9.00	\$1,725.00	98.6	Yes	Yes	Secondary w/ Disinfection	x	x	x		4.25	7.5	No
Del Mar, City of	4,184	Variable	\$81.72	\$3,200.00	98.2	Yes	Yes	No Treatment Process	x				0.554	0.8	No
Della Diablo Sanitation District	189,000	Flat Rate	\$21.36	\$3,978.00	77	No	No	Tertiary				x	12.7	16.5	Yes
Denair Community Services District	4,710	Flat Rate	\$81.53	\$2,000.00	98	No	No	No Treatment Process		x			0.384	0.82	No
Desert Lake Comm. Services District	600	Flat Rate	\$368.33		99.9	No	No	No Treatment Process	x				0.047		No
Devonshire County Sanitation District	2,587	Flat Rate	\$85.42	\$2,853.00	91	No	No	No Treatment Process	x				n/a	n/a	No
Dixon, City of	18,000	Variable	\$26.65	\$40.00		Yes	Yes	Secondary					1.2	2.2	Yes
Donnar Summit PUD	98	Flat Rate	\$183.33	\$1,500.00	66	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.22	0.52	No
Dorris, City of	860	Flat Rate	\$18.25	\$814.00	10	No	No	Primary	x				0.075	0.12	No
Dublin San Ramon Services District	67,664	Flat Rate	\$29.62	\$3,417.00	57.4	Yes	Yes	No Treatment Process	x	x	x		10.87	17	Yes
Dunsmuir, City of	1,576	Flat Rate	\$40.08		98	Yes	Yes	Tertiary					0.25	2	No
E Orco CSD	530	Flat Rate	\$39.85	\$7,200.00	69.92	No	Yes	No Treatment Process	x						No
Earlmar Public Utility District	8,800	Flat Rate	\$14.25	\$5,258.00	100	No	Yes	Primary	x	x	x	x	0.711	0.907	No
East Bay Municipal Utility District	650,000	Variable	\$16.28	\$4,500.00	56.3	Yes	Yes	Secondary w/ Disinfection		x	x	x	70	320	Yes
East Niles Community Services District	26,000	Flat Rate	\$29.53	\$897.70	100	Yes	No	No Treatment Process					2.98	3.19	No
East Valley Water District	67,000	Flat Rate	\$15.36	\$2,640.00	97.3	No	Yes	No Treatment Process	x	x			6.5	17	Yes
Eastern Sierra Community Service District	7,533	Flat Rate	\$3.50	\$1,200.00	99	No	No	Secondary	x	x	x	x	0.68	0.85	No
East Bay Dischargers Authority	900,000			\$1,000.00		No	No	No Treatment Process					72.3	107.8	No
El Centro, City of	42,000	Flat Rate	\$47.40	\$4,198.00	99	No	Yes	Secondary w/ Disinfection	x	x	x		1.1	3.8	No
El Paso de Robles, City of	36,000	Variable	\$31.50	\$1,662.50	90	No	Yes	Secondary w/ Disinfection	x	x	x	x	2.5	4.9	No
El Toro Water District	48,426	Flat Rate	\$17.77	\$4,000.00	100	Yes	Yes	Secondary w/ Disinfection	x		x	x	3.9	5.4	No
Empire Sanitary District	1,500	Flat Rate	\$35.75	\$2,100.00	100	No	No	No Treatment Process	x						No
Endicott - Credit Sanitary Division, City of	19,500	Variable	\$54.30	\$11,857.00	96	Yes	Yes	No Treatment Process	x				1.304		Yes
Endicott-Endicott Sanitary Division, City of	16,500	Variable	\$46.27	\$2,000.00	98	No	Yes	No Treatment Process	x				1.1	1.8	Yes
Fairbrook Public Utility District	23,000	Variable	\$48.00	\$10,275.00		Yes	Yes	Tertiary	x	x	x		1.69	2.7	No
Fairbrook Glendale Community Service District	400	Flat Rate	\$65.00	\$2,523.00	100	No	Yes	No Treatment Process	x				0.032	0.071	No
Fillmore, City of	15,145	Flat Rate	\$86.99		98	Yes	Yes	Tertiary w/ Nutrient Removal	x	x			1	1.8	No
Firebaugh, City of	1,888	Flat Rate		\$5,228.00	99	No	No	Primary	x	x	x		0.593	1.5	No
Folsom, City of	72,203	Flat Rate	\$16.15	\$8,779.00		No	No	No Treatment Process	x				8		Yes
Fort Bragg, City of	5,614	Variable	\$37.75	\$3,000.00	94	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	0.65	1	No
Fortuna Municipal WWTP, City of	11,000	Variable		\$38,000.00	97	No	Yes	Secondary w/ Nutrient Removal	x	x	x		1.5	1.5	No
Fountain Valley, City of	35,000	Flat Rate	\$2.75	\$2,000.00	100	No	No	No Treatment Process	x				6		Yes
Fresno - Wastewater Management, City of	598,732	Flat Rate	\$25.75	\$9.31	86	Yes	Yes	Secondary	x	x	x		62.98	80	No
Garderville Sanitary District	734	Variable	\$51.58	\$5,000.00	96.5	Yes	Yes	Primary w/ Disinfection	x	x	x		0.054	0.162	No
Garden Grove Sanitary District	180,000	Variable	\$25.84	\$4,118.00	74	No	Yes	No Treatment Process	x				25.1		Yes
Gardena, City of	80,000	Variable				No	No	No Treatment Process	x						No
Geyersville Sanitation Zone	1,009	Flat Rate	\$69.75	\$950.00	100	Yes	Yes	Secondary w/ Disinfection	x				0.045	0.062	Yes
Gilroy, City of	90,000	Flat Rate		\$500.00	92	Yes	Yes	No Treatment Process	x	x	x	x	6.23	8.5	No
Glendale, City of	200,000	Variable	\$108.00	\$10,148.00	98	Yes	No	No Treatment Process	x				15		No
Golden Valley Municipal Water District	200	Flat Rate	\$145.00	\$63.00	100	No	No	Primary	x	x	x		0.015	0.6	No
Goliad West Sanitary District	33,000	Flat Rate	\$14.00	\$4,851.00	46.4	Yes	No	No Treatment Process	x				1.53	3.11	No
Grass Valley, City of	12,000	Flat Rate	\$55.00	\$2,000.00	98	No	Yes	Tertiary w/ Nutrient Removal	x	x	x		1.43	2.78	No
Graton Community Service District	1,500	Flat Rate	\$131.20		100	Yes	Yes	Tertiary w/ Nutrient Removal	x		x		0.14	0.85	Yes
Grayson Community Services District	1,077	Flat Rate	\$22.00	\$7,032.00	100	No	Yes	Primary	x				0.1	0.1	No
Greenfield, City of	17,896	Flat Rate	\$20.07	\$6,162.00		No	Yes	Primary	x	x	x	x	1.08	2	No
Groveland Community Services District		Flat Rate	\$53.10	\$8,050.80	56	No	No	Secondary w/ Disinfection	x	x	x		0.165	0.4	No
Guadalupe Community Services District	550	Flat Rate	\$57.00	\$1,211.00	77	No	Yes	Tertiary	x				0.085	0.131	No
Hamilton City Community Service District	2,100	Flat Rate	\$20.92	\$2,940.00	91	No	No	Primary	x	x	x		0.2	0.5	No
Hanford, City of	54,000	Flat Rate	\$22.90	\$4,949.00	0	Yes	Yes	Secondary w/ Nutrient Removal			x	x	4.8	6	No
Happy Camp Sanitary District	700	Flat Rate	\$20.00	\$6,815.00	80	No	Yes	Primary	x				0.067	0.147	No
Hayward, City of	145,000	Flat Rate	\$13.64	\$6,200.00	89	Yes	Yes	Secondary w/ Disinfection	x		x	x	12.5	18.5	Yes
Humboldt Community Service District	20,000	Variable	\$38.18	\$646.72	94	Yes	Yes	No Treatment Process	x				0.88	1.6	Yes
Hoodland, City of	11,254	Variable	\$78.00	\$2,500.00	98	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		0.98	1.4	No
Heather Glen, CSD	80		\$6.00	\$3,979.00	100	No	No	No Treatment Process	x				0.01	0.06	No
Hemet, City of	23,212	Variable	\$7.52	\$3,357.00	0	No	Yes	No Treatment Process	x						Yes
Heritage Ranch CSD	3,200	Flat Rate	\$23.72	\$6,500.00	74	No	No	Secondary w/ Disinfection	x				0.18	0.4	No
Heureka, City of	18,145	Flat Rate	\$50.56	\$17,099.00	84	No	No	No Treatment Process	x				2	4.8	No
Hidden Valley Lake CSD	7,000	Flat Rate	\$50.18	\$0.00	50	No	Yes	Tertiary	x	x			0.2	0.894	No
Himar County Water District	4,850	Flat Rate	\$25.95	\$7,600.00	95	No	Yes	Primary	x				0.35	0.55	No
Hollister, City of	35,500	Flat Rate	\$5A	\$1,300.00	93	Yes	Yes	Tertiary w/ Nutrient Removal	x				2.1	5	No
Holtville, City of	6,032	Flat Rate	\$49.32	\$3,357.00	93	No	Yes	Tertiary	x				0.65	0.85	No
Hono Gardens Sanitary District	11,570	Flat Rate	\$16.00	\$7,500.00	57	No	Yes	No Treatment Process	x				0.593	0.82	No
Huron, City of	6,767	Flat Rate	\$26.00	\$140.00	98.87	No	Yes	Primary	x				0.5	1	No
Idylwild Water District, CA	500	Variable		\$4,133.00	50	No	No	No Treatment Process	x	x			0.089	0.25	Yes
Inland Empire Utilities Agency	830,000	Flat Rate	\$13.03	\$125.00	49	Yes	Yes	Tertiary	x	x			52.7	84.4	Yes
Innhouse Sanitary District	38,000	Flat Rate	\$51.33		81	Yes	Yes	No Treatment Process	x	x			2.6	4.3	No
Inyo Ranch Water District	330,000	Flat Rate	\$17.20		75	Yes	No	Tertiary w/ Nutrient Removal	x	x			18	18	Yes
Ivanhoe Public Utility District	4,500	Flat Rate	\$16.40	\$5,744.00		No	No	Secondary	x				0.80	0.53	No
Jackson, City of	4,800	Flat Rate	\$23.35	\$7,331.00	94	No	Yes	Tertiary w/ Nutrient Removal	x		x		0.39	0.71	No
Jamestown Sanitary District	3,000	Flat Rate	\$41.05	\$1,304.27	100	No	No	Secondary w/ Disinfection	x				0.16	0.23	No
June Lake Public Utility District	350	Flat Rate	\$24.24	\$0.00	95	No	No	Secondary	x		x		0.175		No
Juniper Community Services District	107,000	Variable		\$7,600.00	85	Yes	Yes	No Treatment Process	x				7.5	10.74	No
Kern Sanitation Authority	45,000	Flat Rate	\$12.92	\$200.00	78	Yes	Yes	Secondary	x	x	x	x	3.5	6.2	No
Kings Community Services District	6,000	Variable	\$49.31	\$1,162.00	54	No	No	No Treatment Process	x				NA	NA	No
Key City, City of	11,500	Flat Rate	\$50.00	\$750.00		No	Yes	Secondary	x	x	x		0.0085	1.2	No
La Mesa, City of	59,000	Variable	\$3.10	\$2,768.00	2	Yes	Yes	No Treatment Process	x				4.82	6.834	Yes
Laguna Beach, City of	18,000	Flat Rate	\$45.17		90	Yes	Yes	No Treatment Process	x				0.02		No
Lake Berryessa Resort Improvement District	500	Flat Rate	\$198.00	\$7,000.00	90	No	Yes	No Treatment Process	x	x	x		3.53	11.7	No
Lake County Sanitation District	29,349	Flat Rate	\$26.00	\$15,520.00	89	No	Yes	Tertiary	x	x	x		1.3	2	No
Lake Hemet Municipal Water District	50,000	Flat Rate	\$4.07	\$5,700.00	100	No	No	No Treatment Process	x				0.9	0.8	Yes
Lake Oroville Area Public Utility District	12,000	Flat Rate	\$19.88	\$3,000.00	63	No	Yes	No Treatment Process	x				0.11	0.135	No
Lake Shastina Community Services District	2,800	Flat Rate	\$36.90	\$6,888.00	99.5	No	Yes	Primary	x	x	x		12	18	No
Lancaster, City of	125,000	Flat Rate	\$6.50	\$5,555.00	100	No	No	No Treatment Process	x				0.18	0.16	No
Las Gallinas Valley Sanitary District	30,000	Flat Rate	\$53.50	\$1,690.00	85	Yes	Yes	Tertiary	x	x	x		2.13	2.92	Yes
Las Virgenes Municipal Water District	100,000	Flat Rate	\$54.28	\$2,711.00	95	Yes	Yes	Tertiary w/ Nutrient Removal	x				7.5	12	Yes
Lassen County Waterworks District #1	350	Flat Rate	\$25.00	\$1,803.00	100	No	No	No Treatment Process	x	x	x		0.02	0.04	No
Lathrop, City of	18,318	Flat Rate	\$59.40	\$1,000.00	7	No	No	No Treatment Process	x				0.373	0.966	Yes
Laton Community Services District	1,300	Flat Rate	\$39.00	\$0.00	97	No	Yes	Primary	x	x	x		0.13	0.2	No
Leavitt Lake Community Services District	1,000	Flat Rate	\$37.01	\$16,023.82	97	No	Yes	No Treatment Process	x				0.02	0.086	No
Leland Meadow Water District		Flat Rate	\$100.00	\$16,955.05	100	No	No	Secondary	x				0.002	0.015	No
Lemon Cove Sanitary District	150	Flat Rate	\$9.00	\$2,044.00	90	No	No	Primary	x	x	x		0.011	0.016	No
Lemon Grove, City of	25,000	Flat Rate	\$43.05	\$5,420.00	98	No	No	No Treatment Process	x				2.296	2.8	Yes
Leomore, City of	24,531	Variable	\$27.70	\$1,593.45	75	Yes	No	Primary w/ Disinfection	x	x	x		1.8	2.5	Yes
Leucadia Wastewater District	60,000	Flat Rate	\$21.52	\$15,200.00	80	No	No	No Treatment Process	x				4.01		Yes
Lindsay, City of	11,500	Flat Rate	\$30.00	\$7,166.00	88	Yes	Yes	Primary	x	x	x		0.9	2.24	Yes
Live Oak, City of	8,407	Flat Rate	\$68.80	\$2,915.00	90	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		0.5	1.4	No
Livermore, City of	80,988	Flat Rate	\$40.75	\$4,000.00	93.5	Yes	Yes	Tertiary	x	x	x		7.1	8.5	Yes
Lockeford Community Services District	2,750	Flat Rate		\$190.00	100	No	No	Primary	x	x	x		0.19	0.34	No
Lord, City of	63,500	Variable	\$50.40	\$250.00	97	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		5.2	8.5	No
Lofelia CSD	758	Flat Rate	\$50.00	\$7,873.00	95	Yes	No	Secondary w/ Disinfection	x	x			0.048	0.1	No
Lompoc Regional Wastewater Reclamation Plant	50,000														

Agencies (alpha sort)	Population	Water Use	Monthly User Fee	Connection Fee (per connection)	Source of Revenue: Sewer service charge (%)	BOD/SS Loading	Debt Ind.	Treatment Level	Services Provided				Current ADWW (mgd)	Current Design Flow (mgd)	CIP
									Collection	Intermittent	Treatment	Disposal			
Los Angeles Sanitation, City of	4,000,000	Variable	\$32.63	\$1,235.00	93	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	368	580	Yes
Los Banos, City of	36,546	Flat Rate	\$22.69	\$3,655.00	99	No	Yes	Primary	x	x	x	x	2.9	4	No
Lost Hills Utility District	2,772	Flat Rate	\$23.00	\$3,000.00	20	No	Yes	Primary	x	x	x	x	0.155	0.2	No
Loyalton, City of	832			\$2,991.00	100	No	Yes	Primary	x	x			0.026	0.022	No
Madera, City of	61,850	Flat Rate	\$24.51	\$7,488.48	95	Yes	Yes	Secondary	x	x	x	x	5.39	10.1	No
Malaga County Water District	1,500	Flat Rate	\$39.35	\$500.00	85	No	Yes	Tertiary	x	x	x	x	0.86	1.2	No
Maricopa, City of	708	Flat Rate	\$28.57	\$0.00	100	No	Yes	No Treatment Process	x	x	x	x	0.05	0.11	No
Marin County Sanitary District No. 2	12,000	Flat Rate	\$41.87	\$3,740.91	96	No	No	No Treatment Process	x				1.1	8	Yes
Mariposa Public Utility District	735	Flat Rate	\$21.00	\$1,072.00	95	No	No	Secondary w/ Nutrient Removal	x	x			0.18	0.81	No
Markleeville Public Utility District	200	Flat Rate	\$61.50	\$2,520.00	98	No	No	No Treatment Process	x	x			2.8	48	No
Marysville, City of	12,000	Flat Rate	\$36.83	\$6,148.00	99	Yes	Yes	Secondary	x	x	x	x	12	1.5	No
Maxwell PUD	390	Flat Rate	\$48.00	\$1,200.00	100	No	No	Secondary w/ Disinfection	x				0.14	0.2	No
McCloud Community Services District	1,100	Flat Rate	\$14.78	\$1,478.45	35	No	No	No Treatment Process	x		x	x	0.12	0.3	No
McKinleyville CSD	14,868	Variable	\$12.83	\$3,383.00	88	No	Yes	Primary w/ Disinfection	x	x	x	x	1.001	1.116	Yes
Mendocino City Community Services District	3,500	Flat Rate	\$46.85	\$8,332.00	85	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.08	0.3	No
Mendocino County Wastewater District #2	150	Variable	\$151.45	\$4,500.00	100	Yes	No	No Treatment Process	x	x	x	x	0.006	0.0196	No
Mendota, City of	11,046	Variable		\$4,347.00		No	Yes	Tertiary	x	x	x	x	0.75	2.5	No
Merced, City of	80,608	Flat Rate	\$40.29	\$646.75	93	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	7.5	12	No
Midway City Sanitary District	89,297	Flat Rate	\$7.25	\$277.24	84	No	Yes	No Treatment Process	x				6	18	No
Midway Community Service District	332	Flat Rate	\$24.67	\$4,000.00	N/A	No	Yes	No Treatment Process	x				0.0825		No
Milpitas, City of	70,800	Flat Rate	\$37.96	\$3,767.00	93.5	Yes	Yes	No Treatment Process	x				7.33	14.25	Yes
Mission Springs Water District	15,500	Flat Rate	\$21.23	\$4,427.28	83	Yes	Yes	Secondary	x	x	x	x	1.48	2	No
Modesto, City of	235,000	Flat Rate	\$28.67	\$9,178.00	91.8	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	20.4	70	Yes
Mojave Public Utility District	4,000	Flat Rate	\$11.68	\$4,445.00	15.5	No	No	No Treatment Process	x	x			0.36	0.6	No
Monrovia, City of	40,000	Flat Rate	\$4.77	\$2,563.00	100	No	No	No Treatment Process	x						No
Monterey Water and Sanitary District	6,012	Variable		\$108.00	78	Yes	Yes	No Treatment Process	x				0.3	0.55	Yes
Monterey Sanitary District	10,000	Flat Rate	\$90.00	\$5,000.00		Yes	Yes	Secondary w/ Disinfection	x		x		0.8	1.5	No
Monterey Park, City of	27,000	Flat Rate	\$8.69	\$1,500.00	100	No	No	No Treatment Process	x				2		No
Monterey Regional Water Pollution Control Agency (MRWPCA)	61,000	Variable	\$0.93	\$1,590.56	98	No	No	No Treatment Process	x						No
Morro Bay, City of	268,800	Flat Rate	\$27.00	\$14,242.00	87	Yes	Yes	Tertiary	x	x	x	x	18	29.6	No
Moss Landing County Sanitation District	13,000	Variable	\$41.35	\$7,950.00	100	Yes	No	Secondary w/ Disinfection	x	x	x	x	1.1	2.06	Yes
Moulton Niguel Water District	725	Flat Rate	\$44.25	\$0.00	68	No	Yes	No Treatment Process	x					0.105	No
Mountain, City of	165,000	Variable	\$67.00	\$8,085.00	19	No	Yes	No Treatment Process	x					22.71	No
Mountain View, City of	75,257	Flat Rate	\$24.25	\$45.92	100	Yes	Yes	No Treatment Process	x				7.7	15.1	Yes
MT View Sanitary District	18,253	Flat Rate	\$40.96	\$2,800.00	89	Yes	No	Secondary w/ Nutrient Removal	x	x	x	x	1.55	3.2	No
Napa River Reclamation District	320	Flat Rate	\$65.75	\$1.70	100	No	No	Secondary	x	x	x	x	0.01	0.04	No
Napa Sanitation District	82,700	Flat Rate	\$37.34		64	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	7	15.4	Yes
Nevada County Sanitation Dist #1	200	Flat Rate	\$139.58	\$4,265.00	100	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.006	0.012	No
Nevada County Sanitation Dist #1 (North San Juan WWTP)	269	Flat Rate	\$65.42	\$3,020.00	100	No	Yes	Primary	x	x	x	x	0.012	0.024	No
Nevada County Sanitation Dist. #1	200	Flat Rate	\$203.75	\$3,389.00	100	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.021	0.026	No
Nevada County Sanitation Dist. #1 (Lake of Phoe WWTP)	3,917	Flat Rate	\$88.75	\$220.00	100	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.39	0.72	No
Nevada County Sanitation Dist. #1 (Lake Wildwood WWTP)	4,991	Flat Rate	\$82.92	\$1,140.00	100	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	0.37	1.16	No
Newman, City of	10,306	Flat Rate	\$37.32	\$15,740.00	69.99	Yes	Yes	Primary	x	x	x	x	1.15	1.56	No
Niland Sanitary District	1,050	Flat Rate	\$31.45	\$535.00	98	No	Yes	Primary w/ Disinfection	x	x	x	x	0.067	0.5	No
Nipomo Community Services District	9,000	Flat Rate	\$44.18	\$3,600.00	100	No	Yes	Primary w/ Disinfection	x	x			0.64	0.9	Yes
North Marin Water District	400	Flat Rate	\$58.00	\$10,264.00	78	No	No	Secondary w/ Disinfection	x	x	x	x	0.015	0.122	No
North of River Sanitary District	45,000	Flat Rate	\$18.22	\$500.00	84.9	No	Yes	Secondary	x	x	x	x	5.7	7.5	No
North San Mateo County Sanitation District	102,593	Variable	\$8.84	\$3,039.00	90	No	Yes	Tertiary	x	x	x	x	6.5	8	Yes
North Tahoe Public Utility District	6,400	Flat Rate	\$114.00	\$2,850.00	16.2	No	No	No Treatment Process	x				0.765	6	Yes
Northeast Willows CSD	885	Flat Rate	\$46.69	\$6,000.00	97	No	No	No Treatment Process	x				0.08	0.09	No
Novato Sanitary District	52,750	Flat Rate	\$41.25	\$825.00	78.55	Yes	Yes	Secondary w/ Nutrient Removal	x	x	x	x	4	7.05	No
Oakdale, City of	20,847	Variable		\$2,270.00	96.6	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	1.6	2.4	No
Occidental County Sanitation District	924	Flat Rate	\$140.17	\$1,700.00	100	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	0.022	0.05	Yes
Oceanside Water Utilities Department, City of	189,319	Variable	\$56.76	\$6,703.00	97.8	Yes	Yes	Tertiary	x	x	x	x	11.8	19	No
Ontario Valley Sanitary District	25,000	Flat Rate	\$3.99	\$2,500.00	87	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	1.61	3	No
Ontario, City of	186,134	Flat Rate	\$24.99	\$6,146.00	100	Yes	No	No Treatment Process	x				18.75		No
Orange County Sanitation District	2,500,000	Flat Rate	\$24.50	\$7,860.00	67	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	207	372	Yes
Oro Loma Sanitary District	135,700	Flat Rate	\$15.75	\$730.00	73.5	Yes	No	Secondary w/ Disinfection	x	x	x	x	12.2	20	Yes
Otay Water District	15,200	Variable	\$1.92	\$1,000.00	63	Yes	No	No Treatment Process	x	x			1.2	1.3	Yes
Pacific, City of	37,691	Variable	\$47.27		99	No	No	Tertiary w/ Nutrient Removal	x	x	x	x	4		No
Padre Dam Municipal Water District	67,398	Variable	\$51.89	\$5,711.00	99	Yes	Yes	Tertiary w/ Nutrient Removal	x	x			4.1		Yes
Pajaro County Sanitation District	6,789	Flat Rate	\$33.33	\$8,950.00	77	Yes	Yes	No Treatment Process	x					1.57	No
Palm Springs, City of	44,562	Flat Rate	\$12.00		94.4	No	No	Secondary	x	x	x	x	6	10.9	Yes
Palos Verdes Estates, City of	14,500	Variable	\$20.58			No	No	No Treatment Process	x						No
Pasadena, City of	137,000	Variable		\$1,840.00		No	Yes	No Treatment Process	x				14.8		Yes
Patterson, City of	21,168	Flat Rate	\$33.21	\$3,520.00	100	Yes	Yes	Secondary	x	x			1.4	2.25	No
Penngrove Sanitation Zone	1,297	Flat Rate	\$102.58	\$3,414.00	100	Yes	Yes	No Treatment Process	x				0.076	0.29	Yes
Petaluma, City of	62,000	Variable		\$1,200.00		Yes	Yes	Tertiary w/ Nutrient Removal	x	x			4.7	6.7	No
Pinedale Public Utility District	10,000	Flat Rate	\$25.81	\$4,650.00	54	Yes	No	No Treatment Process	x				0.25	0.75	No
Pismo Beach, City of	8,000	Flat Rate		\$15,840.00	96	No	Yes	Secondary w/ Nutrient Removal	x	x	x	x	1.1	1.9	No
Pittsburg, City of	62,500	Flat Rate	\$15.79		96	No	Yes	No Treatment Process	x				12.9	16.5	No
Pixley Public Utility District	2,310	Variable	\$36.55	\$0.00	50	No	Yes	Secondary	x	x			0.239	5	No
Pleasanton, City of	15,000	Flat Rate	\$6.83	\$2,096.00	94	No	No	Tertiary	x	x			1.7	2.18	No
Placerville CSD	4,800	Flat Rate	\$85.00	\$1,200.00	98	No	Yes	Primary w/ Disinfection	x	x			0.05	0.053	No
Plymouth, City of	1,008	Flat Rate	\$75.59	\$3,000.00	100	No	Yes	Primary w/ Disinfection	x				0.185		No
Poplar Community Service District	2,568	Flat Rate	\$25.00	\$2,600.00	100	No	Yes	Primary	x	x	x	x	0.2	0.31	No
Port Costa Sanitary Department	190	Flat Rate	\$144.92	\$2,834.40	100	No	Yes	Tertiary	x	x			0.01	0.033	No
Porterville, City of	55,107	Variable	\$26.87	\$5,642.50	91	Yes	No	Secondary	x	x	x	x	4.7	8	No
Poway, City of	43,655	Variable	\$30.85	\$0.00	78	Yes	No	No Treatment Process	x				3.008	5.894	Yes
Quincy Community Services Dist.	1,726	Variable	\$43.80	\$2,350.00	95	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	0.5	1.83	No
Rainbow Municipal Water District	6,800	Variable	\$44.56	\$4,480.00	92	Yes	No	No Treatment Process	x				0.764	1.5	No
Rancho California Water District	55,000	Flat Rate	\$37.50	\$5,105.05	72	No	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	2.8	4.5	Yes
Rancho Colina MHC	250			\$10,000.00	100	No	No	Secondary w/ Disinfection	x	x	x	x	0.015	0.02	No
Redlands WWTP, City of	19,371	Flat Rate	\$46.48	\$5,000.00		Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	5.58	10.1	No
Redlands, City of	25,500	Flat Rate	\$47.00	\$5,000.00	96	Yes	Yes	Secondary	x	x	x	x	2	5	Yes
Resort Improvement District No. 1	1,000	Flat Rate	\$32.50	\$3,732.00		Yes	Yes	Tertiary	x	x	x	x	0.17	0.77	No
Richardson Bay Sanitary District	10,000	Flat Rate	\$20.50	\$9,882.00	45	No	No	No Treatment Process	x				N/A	1.206	No
Ridgecrest, City of	27,616	Flat Rate	\$10.00	\$2,950.08		No	No	Primary	x	x	x	x	2.5	3.6	No
Rio Alto Water District	2,400	Flat Rate	\$34.20	\$2,330.00	73	No	No	Tertiary	x	x	x	x	0.13	0.644	No
Riverbank, City of	22,000	Flat Rate	\$21.15	\$2,000.00	100	Yes	No	Primary	x	x	x	x	1.62	7.6	No
Riverside Public Utility District	3,000	Flat Rate	\$39.00	\$3,950.00	50	No	No	Primary	x	x	x	x	0.22	0.25	No
Riverside, City of	300,000	Flat Rate	\$28.55	\$9,391.00	91	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x	x	29.3	40	Yes
Riverside County Service Area # 51	400	Flat Rate	\$28.00		60	No	No	Primary	x	x			0.022	0.044	No
Rodeo Sanitary District	6,000	Flat Rate	\$57.95	\$5,578.00	92	Yes	Yes	Secondary w/ Disinfection	x	x	x	x	0.55	1.14	No
Rohnert Park, City of	49,794	Flat Rate		\$26.49	83.7	No	Yes	No Treatment Process	x				3.3	2.5	No
Roseville, City of	200,000	Flat Rate	\$31.90	\$6,164.00	76	Yes	No	Tertiary	x	x			16	30	No
Rosemead/Los Alamitos Area Sewer District	24,204			\$7,406.20		No	No	No Treatment Process	x						No
Rubidoux Community Services District	26,100	Flat Rate	\$19.50	\$2,580.00	95	Yes	Yes	No Treatment Process	x	x			2	3.055	No
Running Springs Water District	4,862	Flat Rate		\$8,057.00		No	No	Secondary w/ Nutrient Removal	x						

Agencies (alpha sort)	Population	Water Use	Monthly User Fee	Connection Fee (per connection)	Source of Revenue: Sewer service charge (%)	BOD/SS Loading	Debt Inv.	Treatment Level	Service Provided				Current ADWF (mgd)	Current Design Flow (mgd)	CIP
									Collection	Intermittent	Treatment	Disposal			
Salida Sanitary District	13,722	Flat Rate	\$36.73	\$6,156.00	98	No	Yes	Secondary	x	x	x		1.2	2.4	No
San Bernardino Municipal Water Department, City of	290,000	Flat Rate	\$18.50	\$2,425.00	94	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		28.24	33	No
San Bruno, City of	41,114	Variable		\$10,568.92	<1	No	Yes	No Treatment Process							Yes
San Carlos, City of	28,000	Flat Rate	\$53.08	\$2,425.00	99	Yes	Yes	No Treatment Process	x				2.84	4.48	Yes
San Diego, Public Utilities Department, City of	2,126,154	Variable		\$715.00	93.61	Yes	No	Tertiary	x	x	x		160	285	Yes
San Fernando, City of	23,845	Flat Rate	\$28.32			Yes	No	No Treatment Process	x				2,036	2,036	No
San Francisco Public Utilities Commission	800,000	Variable			97	Yes	Yes	Tertiary			x		84	577	Yes
San Joaquin, City of	4,080	Flat Rate	\$37.66	\$1,500.00	100	No	Yes	Secondary	x	x	x		0.46	0.5	No
San Jose/Santa Clara Water Pollution Control Plant	1,400,000	Flat Rate	\$33.83	\$3,082.51	76	Yes	Yes	Tertiary w/ Nutrient Removal			x		111.4	167	No
San Luis Obispo, City of	47,000	Variable		\$4,992.00	91	No	Yes	Tertiary	x	x	x	x	4.5	5.1	No
San Luis Obispo Co Special Districts: County Service Area 1	428	Flat Rate	\$55.66		42	No	No	No Treatment Process							No
San Luis Obispo Co Special Districts: County Service Area 1A	710	Flat Rate	\$50.16	\$2,153.00	82	No	No	No Treatment Process	x				n/a		No
San Luis Obispo Co Special District: County Service Area 1F	3,465	Flat Rate	\$89.55	\$1,750.00	98.8	No	Yes	Secondary w/ Disinfection	x	x	x		0.07	0.12	No
San Luis Obispo Co Special District: County Service Area 7A	1,850	Flat Rate	\$18.84	\$500.00	37	No	Yes	Primary	x	x	x		0.04	0.1	No
San Miguel Community Service District	2,300	Flat Rate	\$37.09		100	No	No	No Treatment Process			x		0.12	0.2	No
San Rafael Sanitation District	38,000	Flat Rate	\$53.13		91.9	No	No	No Treatment Process	x				3.2	4	No
San Simen Community Services District	462	Flat Rate			100	No	No	Tertiary	x	x	x	x	0.09	0.2	No
Sanger, City of	24,638	Flat Rate	\$39.86			Yes	Yes	Secondary	x	x	x		1.8	3	No
Sanitary District No. 5 of Marin County	8,400	Flat Rate	\$68.75	\$6,176.97	82	Yes	Yes	Secondary w/ Disinfection			x		0.58	0.98	No
Santa Ana-PWA Water Resources	327,731	Variable		\$4,905.72	100	No	No	No Treatment Process	x				28	55	Yes
Santa Barbara, City of	90,000	Variable	\$39.21	\$32.50	95	No	Yes	Tertiary	x	x	x		8	11	Yes
Santa Clara, City of	118,830	Flat Rate	\$29.20	\$447.00	96	No	No	No Treatment Process	x	x			14		Yes
Santa Clarita Valley Sanitation District of Los Angeles County	245,966	Flat Rate	\$19.25	\$5,448.00	68	Yes	Yes	Tertiary	x	x	x		19.73	28.1	No
Santa Cruz Sanitation District	60,000	Flat Rate	\$56.37	\$2,030.91	99	Yes	Yes	No Treatment Process	x				5	38	Yes
Santa Maria, City of	100,000	Flat Rate	\$14.86		88	Yes	Yes	Secondary	x	x	x		8.4	13.5	Yes
Santa Monica, City of	68,736	Variable	\$4.52	\$0.00	91	Yes	Yes	No Treatment Process	x				11.36	351.72	Yes
Santa Nella County Water District	1,306	Variable	\$27.25		93	Yes	No	Secondary	x	x	x		0.19	0.4	No
Santa Rosa, City of	189,000	Variable	\$19.63		25	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		15	21.3	Yes
Santa Ynez Community Services District	4,250	Flat Rate	\$57.11	\$7,200.00	75	No	Yes	No Treatment Process	x				0.145	0.212	No
Sewer Agency of Southern Marin	29,000	Variable		\$1,000.00		No	Yes	Secondary w/ Disinfection	x	x	x		2.5	27.4	Yes
Sausalito-Marin City Sanitary District	10,000	Flat Rate	\$53.92	\$4,844.73	81	Yes	Yes	Tertiary		x	x		1.8	6	No
Sea Ranch Sanitation Zone	1,109	Flat Rate	\$79.08		100	Yes	Yes	Secondary	x		x		0.028	0.16	Yes
Seaside County Sanitation District	7,500		\$6,347.69			Yes	No	No Treatment Process	x						Yes
Sebastopol, City of	7,405	Variable		\$5,262.00	100	No	No	No Treatment Process	x				0.474	0.84	No
Sewer Maintenance District 2 - Granite Bay	14,000	Flat Rate	\$48.12		94	No	No	No Treatment Process	x				1.6		No
Sewer Maintenance District 3 - Horseshoe Bar	1,400	Flat Rate	\$9.31	\$5,450.00	87	No	No	Tertiary w/ Nutrient Removal	x		x		0.12	0.3	No
Sewerage Commission-Croville Region	44,000	Flat Rate	\$8.60		99	No	No	Tertiary			x		3	6.5	No
Shasta Lake, City of	3,283	Flat Rate	\$52.01	\$500.00	99.3	Yes	No	Tertiary w/ Nutrient Removal	x				0.7	1.3	No
Sierra Lakes County Water District		Flat Rate	\$120.67		60	No	Yes	No Treatment Process					0.043	0.2288	No
Simi Valley, City of	126,259	Flat Rate	\$26.08	\$21,584.00	33.3	Yes	No	Tertiary w/ Nutrient Removal	x	x	x		9.8	12.5	Yes
Snelling Community Services District	360	Flat Rate	\$25.00		98	No	No	Primary w/ Disinfection	x	x	x				No
Sotana Beach, City of	13,060	Flat Rate	\$47.75	\$3,341.00	100	No	Yes	No Treatment Process	x				1.3	1.6	Yes
Sonoma Valley County Sanitation District	41,855	Flat Rate	\$64.33	\$4,150.00	100	Yes	Yes	Tertiary			x		2.38	3	Yes
South Bay Cities Sanitation District of Los Angeles County	116,370	Flat Rate	\$10.08		57	Yes	Yes	Tertiary		x	x	x			No
South Coast Water District	40,000	Variable		\$115.00	30.7	No	Yes	No Treatment Process	x	x			4	5.75	Yes
South Park County Sanitation District	14,508	Flat Rate	\$67.50	\$115.00	100	Yes	Yes	No Treatment Process	x						Yes
South San Francisco/San Bruno, City of	105,870	Flat Rate	\$44.33	\$9,745.00	96	Yes	Yes	Secondary w/ Disinfection			x		8.48	13	Yes
Spalding Community Services District	1,200	Flat Rate	\$25.00	\$460.28	99	No	No	No Treatment Process	x		x		0.009		No
Squaw Valley Public Service District	1,388	Flat Rate	\$30.83	\$115.07	38.68	No	No	No Treatment Process	x				0.218	2.97	No
Stillwell, City of	734	Variable	\$51.58	\$2,000.00	95.5	Yes	Yes	No Treatment Process	x	x	x		0.054	0.162	No
Stones-Bengard Community Service District	200	Flat Rate	\$15.58	\$1,788.00	90	No	No	Secondary w/ Nutrient Removal	x	x	x		0.009	0.012	No
Sunnyvale County Water District	4,211	Variable	\$89.09	\$1,800.00	100	Yes	Yes	Secondary	x	x	x		0.18	0.35	Yes
Sutter Creek, City of	4,500	Flat Rate	\$80.57	\$2,119.00	99	No	Yes	Secondary w/ Disinfection	x	x	x		0.286	0.48	No
Taft, City of	15,000	Flat Rate	\$20.58	\$500.00	75	No	No	Secondary	x		x		0.963	1.5	No
Tahoe-Truckee Sanitation Agency	50,000	Flat Rate	\$12.75	\$1,200.00	88	Yes	Yes	Tertiary w/ Nutrient Removal					4.86	9.6	No
Tamapalae Community Services District	7,000	Flat Rate	\$64.42	\$1,000.00	95	No	Yes	No Treatment Process	x				0.3	3.7	No
Templeton Community Services Dist	6,838	Flat Rate	\$23.34	\$4,307.00	98	No	Yes	Secondary	x		x		0.15	0.6	No
Tennant Community Service Dist.	54	Flat Rate	\$7.39	\$5,000.00	100	No	No	No Treatment Process	x				0.0047	0.077	No
Thermalito Water and Sewer District	6,646	Variable	\$27.35	\$4,480.00	98	No	Yes	No Treatment Process	x				0.85	4.5	No
Thousand Oaks, City of	100,000	Flat Rate	\$25.45	\$4,500.00	98	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		9	14	Yes
Tipton Community Service District	2,543	Flat Rate	\$21.50	\$4,400.00	98	No	No	Secondary	x	x	x		0.18	0.48	No
Tomasas Village Community Services District	210	Flat Rate	\$63.00	\$8,218.00	95	Yes	Yes	Secondary w/ Disinfection	x	x	x		0.018	0.042	No
Torrance, City of	145,000	Variable		\$10,550.00		No	Yes	No Treatment Process					14.5	27.6	No
Town of Apple Valley	22,200	Flat Rate	\$28.19	\$3,690.00	99	No	No	No Treatment Process					1.7	n/a	Yes
Town of Discovery Bay CSD	13,500	Flat Rate	\$56.77	\$4,320.00	99	No	Yes	Secondary w/ Nutrient Removal	x		x		1.7	2.1	Yes
Town of Los Altos Hills	5,160	Flat Rate	\$61.08	\$4,180.00	94	No	No	No Treatment Process	x						No
Tulare Co. Resource Mgmt. Agency	1,019	Flat Rate	\$42.00	\$9,277.00	99	No	Yes	Primary	x		x		0.12	0.3	No
Tulare Co. Resource Mgmt. Agency	637	Flat Rate	\$35.75	\$0.00	99	No	Yes	Primary					0.0542	0.088	No
Tulare Co. Resource Mgmt. Agency	252	Flat Rate	\$59.25	\$4,500.00	99	No	Yes	Primary	x		x		0.0212	0.035	No
Tulare Co. Resource Mgmt. Agency	387	Flat Rate	\$49.00	\$13,409.00	89	No	Yes	Primary	x		x		0.0308	0.0572	No
Tulelake, City of	1,000	Variable	\$38.40		95	Yes	No	Secondary w/ Disinfection	x	x	x		0.16	0.26	No
Tuolumne City Sanitary District (TCSD)	1,900	Flat Rate	\$52.75	\$4,055.00	94	No	Yes	Secondary	x				0.152	1.88	No
Turlock, City of	69,370	Flat Rate	\$46.33	\$3,050.00	73.96	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		10.7	20	No
Twain Harte Community Services District	2,500	Flat Rate		\$3,430.00	99.1	No	Yes	No Treatment Process	x						No
Union Sanitary District	331,287	Flat Rate	\$26.63		83	No	Yes	Secondary w/ Disinfection	x	x	x		25	33	No
Vallecitos Water District	87,156	Flat Rate	\$35.91		86.5	No	No	Tertiary			x		7.5	12.5	Yes
Vallejo Sanitation and Flood Control District	121,000	Flat Rate	\$41.26	\$5,105.05	87	Yes	Yes	Secondary w/ Disinfection			x		9.1	15.5	No
Valley Center Municipal Water District	3,404	Flat Rate		\$1,000.00	100	Yes	No	Tertiary w/ Nutrient Removal	x		x		0.39	0.57	No
Valley Sanitary District	77,165	Flat Rate	\$22.50	\$4,500.00	92.7	Yes	Yes	Secondary w/ Disinfection	x		x		6.2	11	Yes
Vandenberg Village Community Services	5,497	Flat Rate	\$65.75	\$8,146.00	54	Yes	Yes	No Treatment Process	x				0.457	0.89	Yes
Ventura Water	109,000	Variable	\$26.85	\$3,600.00		Yes	Yes	Tertiary w/ Nutrient Removal			x		8.8	14	Yes
Victor Valley Wastewater Reclamation Authority	280,125			\$1,593.00	85	Yes	Yes	Tertiary w/ Nutrient Removal	x	x	x		13.5	18	Yes
Vista, City of	75,500	Flat Rate	\$53.25	\$7,200.00	87.8	Yes	Yes	No Treatment Process	x	x			4.49	17.6	Yes
Valley Springs PUD							No	No Treatment Process							No
Waterford, City of	8,000	Flat Rate	\$28.56	\$2,339.00	98	No	Yes	Primary			x		0.525	1	No
Watsonville, City of	66,000	Flat Rate	\$23.06	\$3,500.00	99.5	Yes	Yes	Tertiary	x	x	x		7.2	12.1	No
Waukena Sanitary District	3,000	Flat Rate	\$22.00	\$10,352.00	98	No	Yes	Secondary w/ Disinfection	x		x		0.3	0.5	No
Weed, City of	2,983	Variable			90	Yes	Yes	Secondary	x	x	x		0.037	0.673	No
West community Services district	200	Variable	\$47.00	\$4,538.41	10	No	Yes	No Treatment Process	x		x		0.01	0.02	No
West Bay Sanitary District	55,000	Flat Rate	\$62.67		99	Yes	No	No Treatment Process	x	x			3.5	7	Yes
West County Wastewater District	116,799	Flat Rate	\$25.33		89	Yes	No	Secondary w/ Nutrient Removal	x	x	x		7.7	12.5	Yes
West Patton Village CSD	400	Flat Rate	\$30.00		75	No	No	No Treatment Process	x				0.014	0.04	No
Western Municipal Water District	312,700	Flat Rate	\$35.29	\$6,444.00	55.6	No	No	Tertiary w/ Nutrient Removal	x	x	x		6.87	11	No
Wesley Community SV District	500	Flat Rate	\$40.00		100	No	No	No Treatment Process							No
Westwood Community Services District	1,647	Variable	\$34.22		100	No	Yes	No Treatment Process	x		x		0.24	0.3	No
Wheatland, City of	3,469	Flat Rate	\$46.28	\$4,374.00	65	No	Yes	Secondary	x	x	x		0.32	0.62	No
Whittier, City of	85,331	Variable	\$8.01	\$12,377.00	100	No	No	No Treatment Process	x						No
Willits, City of	7,500	Flat Rate	\$60.42	\$600.00	88	No	Yes	Secondary w/ Nutrient Removal	x		x		0.8	1.18	No
Willows, City of				\$2,300.00		No	No	No Treatment Process							No
Winterhaven Water District	394	Flat Rate	\$36.52		100	No	No	No Treatment Process	x				0.05		No
Winton Water & Sanitary District	8,500	Flat Rate	\$48.16	\$237.00	100	No	Yes	No Treatment Process	x				0.75	1	No
Woodbridge Sanitary District	3,368	Flat Rate	\$28.74	\$2,103.00	99.5	No	No								

Agencies (alpha sort)	Population	Water Use	Monthly User Fee	Connection Fee (per connection)	Source of Revenue: Sewer service charge (%)	BOD/SS Loading	Debt Incl.	Treatment Level	Service Provided				Current ADWF (mgd)	Current Design Flow (mgd)	CIP
									Collection	Interceptors	Treatment	Disposal			
Yreka, City of	7,750	Flat Rate	\$42.00	\$500.00	100	No	Yes	Tertiary	x	x	x	x	0.94	1.3	No
Yuba City, City of	65,569	Flat Rate	\$33.60	\$500.00	78.5	Yes	Yes	Secondary w/ Disinfection	x		x	x	6.5	10.5	Yes
Yucaipa Valley Water District	43,670	Flat Rate	\$40.43		95	Yes	Yes	No Treatment Process	x	x	x	x	3.6	8	Yes